Contingent Faculty Perception of Organizational Support and Workplace Attitudes, and Their Student Ratings of Teaching Results in a Public Research University

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Dedication

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Abstract

This dissertation examines contingent faculty's perception of organizational support, workplace attitudes, and Student Ratings of Teaching (SRT) in a large public research university. To address the gap in the knowledge on contingent faculty's Employee-Organization Relationship (EOR) and how students perceive instruction delivered by contingent faculty, as evaluated in SRT, this study examines contingent faculty's perceptions of workplace support, workplace attitudes, and the relationships among them as well as students' evaluation of their teaching performance. The analysis of the same variables for Tenured and Tenure-Track Faculty (TTTF) was also conducted to understand any differences in these groups. In this dissertation, contingent faculty include both contract-based non-tenure-track faculty with professorial titles and instructional staff with instructional titles.

T-tests and stepwise regression analyses were conducted for data from an institutional worklife survey at a large public research university that was collected three times in three years—2008, 2010, and 2012. Samples of TTTF and contingent faculty were drawn from 2,229 faculty and instructional staff who answered the survey and had SRT data (TTTF: 1,708, 76.6% of total; contingent faculty: 521, 23.4% of total). The SRT data were connected to the survey data and then were sorted by the size of class (e.g. under 10: small-size, 10 to under 30: medium-size, 30 to under 50: large-size, and over 50: mega-size) for results.

In the case of the institution where this dissertation is based on, the employment relationship of contingent faculty was closer to a combined economic and social exchange model than to a pure economic exchange model or underinvestment model.

Contingent faculty's satisfaction with work was higher than TTTF at a statistically significant level. Their satisfaction with coworkers and perception of being supported at work were also higher. Their affective commitment level was slightly higher than TTTF as well. Whereas these results might be partially attributable to the relatively stable status of contingent faculty in this study (who work for more than 50 percent FTE), they indicate that, as a collective, contingent faculty represent a significant contributor to the university, who are satisfied with their work, enjoy the community they are in, and are committed to their institution.

SRT results indicated that, overall, students were satisfied with teaching by contingent faculty and TTTF across all sizes of classes. Nevertheless, there were statistically significant differences in SRT means between contingent faculty and TTTF in medium-size (10-30 students) and large-size (30-50 students) classes. Contingent faculty had higher SRT mean results in all areas of SRT items in medium-size classes and in 'class presentation,' 'feedback,' 'deeper understanding,' and 'interest stimulated' in large-size classes than TTTF. These results not only refute the misconception that contingent faculty have too little time to provide students with feedback but also support that they also provide students with good teaching, at least in medium-size and large-size classes. Perception of being supported at work was the strongest predictor for explaining both overall satisfaction and affective commitment of contingent faculty. Satisfaction with pay and benefits was the next most significant factor.

Keywords: contingent faculty, public research university, employee-organization relationship, perception of organizational support, workplace attitudes, student ratings of teaching

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Chapter 1: Introduction

"*In a university, resources mean much more than dollars. Changes in the kinds of people who attend as students and work as faculty alter the nature of the enterprise in fundamental ways*"(Mitchell, 1997, p. 268)

Established in late 19th century as full-time professionals after World War II, the quintessential type of professorate in higher education has been Tenured and Tenure-track Faculty (TTTF) (Brubacher & Rudy, 1997; G. Rhoades, 1996). Such individuals were typically assigned to tripartite roles—advancing disciplinary knowledge, distributing this knowledge in classrooms, and serving their academic community and campus (Martin & Berry, 1969). With secured status and academic freedom, the American faculty were central to the flourishing of higher education.

Nevertheless, traditional tenure-track hires, which include a six-year (or longer) period followed by securing tenure with long-term job security, are increasingly complemented by various types of full-time or part-time, contract-based or "contingent" faculty appointments. For example, between 1975 and 2007, the percentage of full-time, non-tenure track faculty has doubled nationwide from 18.6 percent to 37.5 percent (Ehrenberg, 2010, October 1; Newfield, 2008). Nearly 60 percent of new full-time faculty appointments are now under temporary contracts. During the past three decades, the number of part-time faculty (who are mostly on non-tenure track) has also more than tripled. The fact that the use of full-time and part-time, non-tenure track faculty has become more common across many types of institutions is a sign of growing diversity of faculty work and appointment systems (Bataille & Brown, 2006; Schuster & Finkelstein, 2006).

Although an increasing portion of research staff members are also hired on a contingent-faculty basis, this trend is more apparent when recruiting teaching faculty. Contingent faculty now constitute a substantial proportion of the teaching staff in higher education, regardless of the type of institution (Gappa & Leslie, 1993; Kezar & Sam, 2011). More than half of all professionals delivering instruction in higher education are non-tenure track contingent professionals (Schuster & Finkelstein, 2006), most often heavily involved in undergraduate instruction (Baldwin & Chronister, 2001; Baldwin & Wawrzynski, 2011; Newfield, 2008; G. Rhoades, 2006).

Several studies have drawn attention to how the emergence of contingent faculty resulted in a significant change in the composition of human resources in academia (Cross & Goldenberg, 2009; Kezar & Sam, 2010a; Lee, Cheslock, Maldonado-Maldonado, & Rhoades, 2005; G. Rhoades, 2006). According to Cross and Goldenberg (2009), it is unlikely that positions once made available to contingent employment will be replaced with TTTF hires because institutional budgets have been permanently adjusted to the reduced cost. Faculty employment practices in academia have become more similar to trends followed in the corporate sector in the pursuit of managerial flexibility and cost efficiency (Levine, 1997; G. Rhoades, 1996).

The growing presence of non-tenure track, contingent faculty also reflects the changing characteristics of the nation's workforce. Since 1970s, there has been an increased use of "part-time, temporary, contract, seasonal, or casual workers—collectively termed contingent workers" (Hulin & Glomb, 1999, p. 87). While offering the benefit of more flexibility to organizations, however, it is also expected that, as a consequence, these contingent employment patterns may challenge traditional workplace values such as job security, loyalty, and commitment (Rousseau

& Schalk, 2000). The working arrangements in contracts typically do not guarantee the stable employment status that traditional employment used to grant to faculty. Chomsky (2014) commented that the adoption of a corporate model and pursuit of flexibility in employment decisions in higher education can be hazardous to faculty morale and the quality of education.

Statement of the Problem

Although higher education is "a labor-intensive enterprise" (Blackburn & Baldwin, 1983, p. 5) and institutions are now increasingly dependent on contingent faculty for teaching, little has been known about their academic worklives. A recent longitudinal study on contingent faculty's psychological experiences found that they perceived unique stressors at work due to their contingent employment status. Negative outcomes such as depression, anxiety, and stress at work were also reported (Reevy & Deason, 2014). Given the increasing presence of contingent faculty in the primary role of teaching, understanding how they perceive their worklives is essential for ensuring their successful achievement of an institution's educational mission.

Research on college student enrollment indicates that student perception of the faculty is the main factor contributing to student success (Hofman, Posteraro, & Presz, 1994, May). According to Umbach and Wawrzynski (2005)'s study, students reported higher levels of engagement and learning at institutions where faculty interacted with, challenged, and valued their educational experiences. It is clear that faculty, who are committed to students' learning, are very important for quality education. Nevertheless, neither contingent faculty's perceptions of their worklives nor students' perceptions of contingent faculty's instruction have been well documented.

What distinguishes today's contingent faculty in higher education from contingent workers in other industries is the requirement of extensive graduate training for advanced degrees, for example, Ph. D., and other professional identities (Kezar & Sam, 2011). Furthermore, contingent faculty directly interact with students, through their instruction, whereas contingent employees in other industries are typically not as engaged with their service recipients (Cross & Goldenberg, 2009). In spite of these distinctive characteristics, however, many aspects of academic employees with non-traditional, contingent status have not informed the human resources policies of higher education. Organizations, including universities, need to be aware that the use of contingent employees can have multi-faceted effects on them (Hulin & Glomb, 1999) as more of these employees work for them than before.

Given that tenure-ineligible contingent faculty are not provided with job security—a guaranteed setting for values such as academic freedom or the informal "intergenerational transmission" (Ehrenberg, 2010, October 1, p. 5) of knowledge and experiences between young and older faculty within the tenure system—their employment relationships with institutions may not be the same as TTTF. The existing body of literature on employment relationship, for both academic and general employees, however, has been primarily based on the concepts of full-time, permanent employees, which prevailed in the past century (Pfeffer & Baron, 1988). Moreover, existing research on contingent faculty mostly borrowed from a deficit model of contingent employees from business/corporate sectors, tending towards fixation on the deficient image.

Purpose Statement

To address the gap in the knowledge on contingent faculty's employment relationship with their institution and how students perceive instruction delivered by contingent faculty, as evaluated in Student Ratings of Teaching (SRT), this study examines the relationships among their perceptions of workplace support and workplace attitudes and understanding students' evaluation of their teaching performance. The purpose of this dissertation is, therefore, to study how different demographic, attitudinal and organizational factors are related to overall job satisfaction and organizational commitment of contingent faculty. The analysis of the same variables for TTTF was also conducted to understand any difference in these groups. In addition, SRT results were compared between contingent faculty and TTTF to investigate students' perception of their teaching. The analysis is limited in the case of one public research university where the data was collected. Contingent faculty include both contract-based non-tenure track faculty holding professorial titles as well as instructional staff without professorial titles who are employed at the university.

Research Questions

The following research questions were asked to compare workplace attitudes (job satisfaction, overall satisfaction, and affective organizational commitment) and perception of organizational support of contingent faculty and TTTF and to examine the relationships among demographic factors, job satisfaction, perception of organizational support, and overall satisfaction/affective commitment. SRT were also compared. The questions are as follows:

1) Do contingent faculty and TTTF hold different attitudes about the workplace?
2) Do contingent faculty and TTTF hold different perceptions about organizational support?
3) What factors significantly relate to the overall satisfaction of contingent faculty and TTTF?
4) What factors significantly relate to the affective commitment of contingent faculty and TTTF?
5) Are there differences in how students evaluate the teaching of contingent faculty and TTTF?

Overview of the Dissertation

This dissertation is organized into. The first chapter included an introductory background of the study, statement of the problem, purpose statement, research questions, and an overview of the paper. In chapter two, a review of the literature on contingent faculty in higher education, public research universities, and specialization of academic work were presented. The main concepts of study—social exchange, perceived organizational support, organizational commitment, and job satisfaction—were also introduced, including literature review. The validity of SRT, as a means of assessing students' satisfaction with teaching performance, was also discussed. In chapter three, methodology was presented and then followed by results in chapter four. Lastly, in chapter five, the paper was concluded with implications, recommendations, limitations, and suggestions for future research.

Chapter 2: Literature Review

Contingent Faculty in Higher Education

In general, contingent faculty refer to part-time or full-time, contract-based employees in academia who are involved in research or teaching. There is no single, agreed upon taxonomy for such individuals across institutions. Instead, many titles, often unique to each institution, have proliferated (Cross & Goldenberg, 2009). The types of contingent faculty include tenure-ineligible term faculty or adjunct faculty who are hired on contracts for a certain period of time and instructional staff, such as lecturers, teaching specialists, and instructors(Jaeger, 2008; Kezar & Sam, 2010b). Technically, postdoctoral researchers and graduate teaching assistants are also part of contingent faculty, but they are not included in the definition of contingent faculty in this study because postdoctoral researchers are mainly involved in research and instruction by graduate teaching assistants is often regarded as part of their graduate training (Cross & Goldenberg, 2009).

Term faculty and adjunct faculty are increasingly hired in various disciplines of academia including practice-based fields such as medicine, management, law, and architecture. Such professionals are sometimes titled “professors of practice” or “clinical professors” (Ehrenberg, 2010, October 1). Term faculty either perform research or teach (or sometimes both) depending on their contract conditions, and adjunct faculty are primarily involved in teaching. Instructional staff teach within a variety of curriculum areas, such as writing, science labs, foreign languages, and mathematics, most typically in large size, gate-keeping courses, such as introductory science, mathematics, and engineering (Eagan & Jaeger, 2008).

In humanities, temporary instructors deliver more than half of undergraduate instruction (Newfield, 2008). According to a nationwide institutional-level survey by CEWUM (2007), approximately 80 percent of contingent instructional faculty were primarily assigned to teaching undergraduate core courses in departmental curricula. Depending on academic discipline, the percentage of part-time faculty varied from 30 percent (agriculture/home economics) to over 50 percent (business, education, and fine arts) (NEAHERC, 2007). The percentage of full-time non-tenure track faculty out of total full-time faculty was the highest in the health sciences (22.4%), followed by the humanities (15.9%) and the liberal arts and science (11.8%) (Schuster & Finkelstein, 2006).

The reasons that contingent faculty have been increasingly hired at higher education institutions, including public research universities, are largely summarized under four categories: (1) managerial flexibility and cost efficiency, (2) teaching needs for diverse field experience and knowledge, (3) needs for flexible work arrangements (e.g. for retiring faculty), and (4) division of work eased by technological advancement (e.g., online instruction). Although the increase of contingent faculty has been common in both public and private higher education, consistent pressures to expand enrollments, to maintain a moderate and affordable tuition level, and to provide students with aids to ensure access have been noticeably followed by an increase in the use of flexible short-term teaching job arrangements in public institutions, given their shrinking public subsidies (Baldwin & Chronister, 2001; Gappa & Leslie, 1993). The demands for teaching the latest developments in the field for practice-based knowledge, as well as the need to accommodate flexible work arrangements for various faculty statuses (e.g. retirement, leaves, research grants,

and avoidance of teaching introductory level courses), have also resulted in the employment of contingent faculty (Cross & Goldenberg, 2009). Lastly, according to Schuster and Finkelstein (2006), the wide use of information technology has contributed to the increased emergence of contingent teaching staff. Online introductory level courses that are heavily dependent on instructional technology have also led to hiring more specialized contingent teaching staff who have expertise in creating or delivering online educational curriculums (Ehrenberg, 2010, October 1).

Nevertheless, despite managerial flexibility and cost efficiency that may result from the use of contingent faculty, a growing body of literature indicates that increased instruction by contingent faculty is associated with a negative impact on student outcomes, such as a lower graduation rate (Ehrenberg & Zhang, 2005; Jacoby, 2006); a lower transfer rate (Eagan & Jaeger, 2009; Jaeger, 2008; Jaeger & Eagan, 2011b); and a lower retention rate (Jaeger & Eagan, 2011a; Ronco & Cahill, 2004, May). The proportion of contingent faculty was negatively associated with students' non-class-related interaction with them (Umbach, 2007). On the other hand, another line of research suggested that the influences of contingent faculty were neither always negative nor dependent upon their employment status. Cox, McIntosh, Terenzini, Reason, and Quaye (2010) reported that contingent faculty had as much as or even more interaction with students outside of class sessions, compared to TTTF. According to Eagan and Jaeger (2008), while students were negatively affected by part-time faculty, neither having graduate teaching assistants nor full-time, non-tenure track faculty as their instructors was negatively associated with persistence into the second year.

Some aspects of teaching-related behaviors of contingent faculty also have been

examined by researchers. For example, Johnson (2011) found that contingent faculty tended to give higher grades, which may lower students' motivation for hard work. A study on contingent faculty's teaching practices revealed that, whereas part-time contingent faculty's teaching practices were somewhat different, full-time contingent faculty had teaching practices similar to those of TTTF, such as assigning term/research papers and requiring multiple drafts of written work and oral presentations (Baldwin & Wawrzynski, 2011).

Contingent work. Contingent work is defined as any job in which an employee is neither explicitly nor implicitly given job security for long-term employment or jobs in which minimum work hours can vary non-systematically (Polivka & Nardone, 1989). Contingent work is usually offered through some form of temporary, contract, or part-time arrangement. Categories of contingent work include job arrangements such as these: 1) work through temporary staffing agencies; 2) work as a self-employed independent contractor, selling their service to a client organization on a fixed-term or a project basis; 3) direct employment by the employing organization for short-term assignments, most often found in large organizations with irregular staffing requirements; and 4) seasonal work contracts directly hired by an organization (Connelly & Gallagher, 2004).

For contingent faculty in higher education, the most common form of contingent work is direct employment for the institution on an annual or multiple-year contract. Such employment relationships are common for term faculty and instructional staff. For adjunct faculty, a seasonal contract for a single semester is common. The typical recruitment process includes job postings open to the public or the use of internal applicant pools of recent graduates.

Work environments of contingent employees can be complex in nature and have somewhat mixed consequences for organizations. On the positive side, employment of contingent workers can provide employees with positive flexibility in work arrangements, although they are sometimes accompanied with reduced wages or fringe benefits, or reduced career options (Alison & Uzzi, 1993). Educated employees, including female professionals who have family responsibilities and dual-career couples, tend to prefer flexible job arrangements that allow for creation of balance between work and family responsibilities (Hiltrop, 1995; Lundy & Warme, 1992).

On the less positive side, those who are involved in contingent work are often not guaranteed the traditional full-time, permanent job status with benefits (Callaghan & Hartmann, 1991). Contingent employees under various contracts and conditional work conditions may neither have as much engagement as their permanent counterparts nor have as productive forms of communication with colleagues as their permanent counterparts. For example, it is likely that part-time workers, who work only part of a day or a week, are regarded as being only partially included in the organization and involved in marginalized roles (Katz & Kahn, 1978; Peters, Jackofsky, & Salter, 1981). According to Blair-Loy (2003), part-time employees were not always viewed as committed as full-time employees in their workplace and tended to be limited in their career advancement.

Research also indicates that there may be other negative consequences to employers and organizations when organizations hire temporary workers (Hom, 1979). For example, this form of hiring may give an impression that employers are less committed to their employees than when employing non-temporary employees only and diminish even the confidence of these permanent employees in their organization

(Pearce, 1993). In a similar vein, Kraimer, Wayne, Liden, and Sparrow (2005) found that permanent employees' perception of job security was negatively related to the threats associated with their organization's use of temporary employees.

Demographics. Gender, marital status, and family responsibilities are significant factors related to the uneven distribution of contingent faculty (Cross & Goldenberg, 2009; Perna, 2001, 2005). For example, the distribution of female part-time faculty varied by the types of institutions, ranging from the lowest percentage (23.1%) in private doctoral institutions to the highest percentage (59.9%) in liberal arts colleges (Gappa & Leslie, 1993). According to Schuster and Finkelstein (2006), nearly half of all contingent faculty members were women whereas women represented only a quarter of TTTF.

Social norms and structural inequality contribute to this distinct difference in the distribution of contingent faculty by gender. According to Ridgeway (2011), gender is one common frame through which individuals' social relations and structure of workplace practices are shaped in discriminative ways. It can work as a stereotype that renders certain behavioral expectations as one's racial identity or social class does. For example, women tend to be primarily held responsible for taking caring of their dependent children and are often culturally expected to prioritize the needs of their family over their own careers (Hays, 1996), thus channeling more of them to contingent faculty positions that are usually less demanding than TTTF in terms of research productivity.

For this reason, gender, marital status, and the number of children are critical factors in the unequal distribution of female faculty in the contingent track. Female faculty members were more likely to be working in part-time employment and in

lower rank positions at less competitive institutions that require less demanding commitment to work (Basset, 2005; Lundy & Warme, 1992; Wolfinger, Mason, & Goulden, 2008). A majority of contingent faculty who teach writing were also disproportionately women (Schell, 1998). Part-time contingent faculty women were those who were most concerned about their job security, although they were most likely to leave their jobs when their spouses move to a new place for employment (Harper, Baldwin, Gansneder, & Chronister, 2001).

There is also an emerging trend of new contingent faculty groups who are younger and more diverse. In general, part-time faculty were younger than full-time faculty: a majority of part-time faculty (51.9%) were 30-44 years old whereas nearly half of full-time faculty were between 45-59 years old (Gappa & Leslie, 1993). Faculty of color increased by 87 percent in full-time non-tenure-track appointments (Baldwin & Chronister, 2001).

Workplace attitudes and behaviors. Workplace satisfaction of contingent faculty was related to their economic condition and freedom to make a choice to take their contingent position. For example, the smaller the proportion of income from part-time teaching out of total household income was, the more contingent faculty reported they enjoyed intrinsic reward from their work, "intellectual stimulation of interaction with students part of the time," (Lundy & Warme, 1992, p. 272) whereas those who were highly dependent on the income from their part-time teaching tended to describe their work experience as "being exploited to the fullest" (p. 272). In line with this study, Maynard and Joseph (2008) also revealed an interesting relationship between job satisfaction and faculty's freedom of choice for their part-time job status. Among full-time, voluntary part-time, and involuntary part-time groups, voluntary part-time

faculty members were as satisfied as full-time faculty members. On the other hand, involuntary part-time faculty were least satisfied although no difference was reported among three groups in their affective commitment to the organization.

Age and gender are also significant factors in contingent faculty satisfaction. Using a mixed-method approach, Feldman & Turnley (2001) found that contingent faculty who were in their late career stages tended to be more satisfied with their jobs, committed to their professions, and engaged in altruistic citizenship behavior for the institution although there was no significant difference in their in-role performance depending on career stage. Based on the 1993 National Survey of Postsecondary Faculty (NSOPF) data, Toutkoushian and Bellas (2003) reported that part-time, female faculty were less satisfied with their benefits yet more satisfied with their salary than male part-time faculty.

Lastly, work status (part-time or full-time) served as a distinctive predictor in the work behaviors of contingent faculty. For instance, full-time contingent faculty spent significantly more hours per week (6.85) than TTTF (5.08) on advising assigned advisees (Bland, Center, Finstad, Risbey, & Staples, 2006). However, part-time contingent faculty members tended to have lower academic expectations for students, spent less time preparing for classes, and were less engaged in their interaction with students than full-time faculty members (Umbach, 2007).

Organizational support. Organizational support in this context can refer to a number of different working conditions that may exist for both TTTF and contingent faculty. According to Kezar and Sam (2010b), these conditions may include compensation and benefits, such as pay and health plans, access to internal grants, office space, equipment, library resources, and availability of nearby parking. Faculty

development opportunities (e.g. orientations, retreats, mentoring programs, travel funds and workshops) also represent one form of organizational support. In specific, Perceived Organizational Support (POS) indicates the extent that employees perceive provision of these work conditions as intentional considerations and allocation of resources from their organizations.

As ineligibility to hold tenure implies, contingent faculty have been often identified with those who have insufficient organizational support and are faced with inequality. According to a survey conducted at a large university in a Mid-Atlantic state, the level of POS was lower for contingent faculty than TTTF (Wyatt-Nichol, 2007). In a focus group at the University of North Carolina (Bataille & Brown, 2006), contingent faculty shared that they had conditions of lower salaries, lack of eligibility for employee benefits, inconsistent assignment and title, lack of job security, unclear expectations for performance evaluations, lack of office space and other resources, detachment from departmental and institutional governing bodies, and feelings of being undervalued by the unit to which they report as well as the institution. Although contingent faculty increasingly contribute to the teaching mission of universities, they were often neither as significantly involved in governance as TTTF nor in faculty development opportunities that include "all the activities designed to improve faculty performance in all aspects of their professional lives," (Nelsen, 1983, p. 70) as they have been the norm for TTTF.

According to Katz (1964), an organization can attract and retain people based on the motivational aspect of organizational behavior. Applying these motivational

patterns[1], some universities and colleges have attempted seminal initiatives to support their contingent faculty, which yielded several positive outcomes for a modest investment of resources (Lyons, 2007). According to a case study by Harber and Lyons (2007), some of these examples included: 1) a systematic orientation for basic guidelines on institutional policy and procedures; 2) instructor effectiveness training; 3) a mentoring program between a new and an experienced contingent faculty member; 4) a series of meal meetings exclusively for contingent faculty members; and 5) resource handbooks or other related materials. These initiatives not only help contingent faculty to internalize values that embrace the goals of the organization but also help them feel supported by successfully achieving their performances and building relationships with other contingent faculty peers.

In regards to instructor effectiveness training for contingent faculty, face-to-face training was reported to be more effective than an online training in various areas as follows: respect and concern for students, organization of instruction, use of a variety of teaching materials and methods, use of technology, encouragement of students' creative and critical thinking, and response to students' questions. With appropriate support for teaching, even contingent faculty who taught for the first time in their careers were able to make a successful transition to their teaching job, according to a reflection written by a medical field practitioner who had changed his career to become a part-time college teacher (Schwartz, 2007).

Instrumental reward geared to individual effort or performance was also effective

[1]1) Rule compliance to system norms, 2) instrumental system rewards, 3) instrumental reward geared to individual effort or performance, 4) intrinsic satisfaction from specific role of performance, 5) internalized values of the individuals that embrace the goals of the organization, and 6) social satisfactions from group relationships

when supporting contingent faculty. Lambert and Cox (2007) found that official recognition of outstanding performers encouraged them to feel appreciated, given that a majority of contingent faculty found it challenging to feel connected to their institutions. Presence of support systems—such as training programs and high-performer rewards including feedback from student reviews—did help contingent faculty achieve more as teachers with a heightened sense of loyalty to their institution and engendered confidence.

Despite the importance of policies and practices that help contingent faculty feel connected to their institutions, in most campuses, a systematic understanding of the worklives and employment relationship of contingent faculty—such as their perception of organizational support, workplace attitudes, and work performance—has been absent (Harper et al., 2001; Kezar & Sam, 2011). To guide institutional policies in a way to promote contingent faculty's contribution to their institutions, according to Kezar and Sam (2011), contingent faculty's professional characteristics and aspirations need to be carefully understood by the institutions and administrators.

Public Research Universities and Contingent Faculty

Representing approximately 12 percent of America's higher education institutions, public universities have been central to the prosperity of the American higher education system. They enroll 35 percent of the nation's students and hire approximately half of all faculty (Gumport, 1997). In particular, since the industrialization and urbanization in the late 1880s and early 1900s, public research universities have made remarkable contributions to the American society (Lee et al., 2005). One of their most significant contributions, for example, has been the

education of a large number of science and engineering undergraduates needed in the workforce (Brint, 2006). According to Yudof (2003, p. 241), public research universities have been "the envy of the world."

While prestigious, private universities attract and educate only a small number of students, large public research universities produce research studies and Ph.D. graduates in a greater quantity and provide undergraduates with exposure to research experiences (Cross & Goldenberg, 2009). According to Newfield (2008), public research universities in the United States have supported the notion that quality in teaching and research and equality in access can be achieved at the same time and can reinforce each other. Due to state subsidies, such institutions have offered a more affordable cost option for students compared to private institutions.

At the same time, currently the public appears concerned about faculty's commitment to undergraduate education at large public research universities, given the heightened demands for faculty's time and attention to graduate students and research activities (Altbach, 2005; El-Khawas, 1992). While the impact of undergraduates' involvement in research experiences at these institutions has been largely left unheralded(Cross & Goldenberg, 2009), the public demands that higher education be more transparent, accountable and outcome-driven for both what is taught and how students learn (Hearn, Lewis, Kallsen, Holdsworth, & Hones, 2006; Heck, Johnsrud, & Rosser, 2000; Lee et al., 2005; Rachelle, 2005). With such change, understanding the contributions of contingent faculty at public research universities becomes ever more important because of their growing presence in teaching (Cross & Goldenberg, 2009).

Research universities have not paid as much attention to their non-traditional

faculty as other types of institutions that have a longer history of employing contingents as a substantial part of instructional staff. For example, the proportion of part-time faculty is still relatively smaller (14.4 percent) in public research universities than in other types of higher education institutions. However, the proportion of full-time contingent faculty is the highest among the doctoral research institutions (Bland et al., 2006). The use of graduate students in undergraduate lower-division courses has been common, but their experiences have been regarded more as a part of their graduate training (AAUP, 1993).

Nevertheless, the presence of contingent faculty is now no longer possible to ignore, even in these institutions, in terms of quantity and influence over education (Cross & Goldenberg, 2009; Lambert & Cox, 2007). Although the relationship between students' learning and contingent faculty's teaching in research universities has been only minimally studied, a recent study of freshmen at a private research university in the Midwest found that students, particularly those who are average or are less-qualified, learn relatively more in their introductory courses from non-tenure track faculty, across a variety of subject areas (Figlio, Schapiro, & Soter, 2013, September 1).

Specialization in academia. The emergence of "two-tiered employment systems," (Newfield, 2008, p.20) in which the rewards, status, and working conditions of TTTF are disparate from those of contingent faculty, has become common across the types of institutions. One of the reasons is the research-driven culture that has intensified the division of positions for doing research and teaching undergraduates, especially in research universities(Cross & Goldenberg, 2009; Cross & Goldernberg, 2003; Ehrenberg & Zhang, 2005). While research publications are critical for individual

tenure review, institutional reputation, and attracting resources, teaching does not guarantee such rewards and has not been supported by the institutions with the same intensity. Although contingent faculty may have extensive experience in teaching, their positions are not tenure eligible since tenure track positions are used when there is a desire to identify a person who can produce scholarly products of the appropriate quality and pace. This is more so in highly ranked research universities that attempt to sustain their scholarly reputations (Cross & Goldenberg, 2009).

According to Nyhagen and Baschung (2013), this specialization of functions has been closely related to the increasing constraints on funding for universities. An increase in the use of contingent faculty is related to the rising cost for research and hiring TTTF. Ehrenberg and Zhang (2005) found that an increase in the proportion of non-tenure track, full-time faculty was positively associated with the amount of external research and development expenditure per tenure-track faculty, particularly at the doctoral-level institutions. As a consequence, teaching demands were increasingly met by contingent faculty who were hired by contracts at a lower cost.

In campus research institutes which specialize in research, it has become more common to keep the level of teaching workloads for faculty more manageable(Jauch, 1976; Martin & Berry, 1969) and to make obtaining research resources easier (Nyhagen & Baschung, 2013). Higher education institutions with limited financial capacity increasingly hire, for their courses, less costly contingent teaching staff with relatively more general training and educational background than TTTF with specific skill sets and qualifications for their research.

Some are not content with this growing separation. Baldwin and Chronister (2001) found in their study that, some faculty in research universities expressed their

concerns over separating research and teaching functions, commenting that “In Arts and Sciences, you do research that informs your teaching. It carries over to your classroom” (p.125). In addition to lowering the quality of teaching, others are concerned that the overall research productivity of a department is likely to decrease when non-research-oriented non-tenure track faculty employment is on the rise, leading to fewer scholarly outcomes produced. A study by Bland et al. (2006) in a public research university revealed that TTTF were significantly more productive in both research and education and more committed to their positions. However, teaching performance, in which TTTF were found to be more productive than contingent faculty, was only measured in the terms of the total number of classes, students, and hours spent on teaching. How students perceive their teaching “quality,” for example, was not examined.

What is hard to deny is that, with increasing specialization and division of faculty roles, faculty appointment systems have become more diverse. Faculty are hired under a variety of appointment types, hiring procedures, salary ranges and promotion benefits (Bland et al., 2006). Given that the contingent faculty tracks were not the norm in the recruitment system of academia, especially in research universities, current recruitment and HR system may need a more established understanding of contingent faculty groups. Institutions need to be aware of the possibility that contingent faculty can be great assets even in research universities but only when they are hired for appropriate reasons and strategically incorporated into their academic community (Cross & Goldenberg, 2009).

Conceptual Framework

In this section, a conceptual framework is presented, followed by explanations of the concepts contained in this framework. Based on the conceptual framework, this study examines the relationships among three constructs: perception of organizational support, job satisfaction, and organizational commitment. SRT was used as an indicator of students' satisfaction with faculty's teaching.

Social exchange theory. Whereas some aspects of contingent faculty demographics, workplace attitudes, and educational influence have been informed by a growing, although still limited, body of literature, less is known regarding contingent faculty's employment relationship with higher education organizations. According to Tsui, Pearce, Porter, and Tripoli (1997), Employee-Organization Relationship (EOR) entails employer's expectation from its employees. Different types of EOR include: 1) quasi-spot contract (pure economic exchange), 2) mutual investment (combined economic and social exchange model), 3) underinvestment, and 4) overinvestment[2]. These four types can also be divided into balanced and unbalanced approaches (see Table 1 below). Balanced approaches indicate that the obligations of each party are at the same level. In quasi-spot contract and mutual investment, examples of balanced approaches, the exchanged obligations between employer and employees are either narrow and specified (quasi-spot contract) or broad and open-ended (mutual investment). In quasi-spot contract, also known as pure

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[2] 1) Quasi-spot contract: flexibility, economic inducements, and well-specified contributions
2) Mutual investment: clan-like flexibility, some degree of security, and expandable work roles
3) Underinvestment: employer desires flexible/expandable work behavior by employees but attempts to retain flexibility to hire and fire
4) Overinvestment: employer provides relatively high employment security but expects only narrowly specified role behaviors

economic exchange, the relationship is based on a market-like flexibility. Employer is free to hire and fire and offer, mostly, monetary rewards. Employees are expected to achieve clearly defined short-term goals in a close-ended relationship. They are not expected to help other employees or be concerned about the overall performance of company. A stockbroker in a brokerage firm could be an example of this. On the other hand, mutual investment—also known as a combined economic and social exchange model—shows a clan-like flexibility. Employer offers some degree of employment security, and employees are expected to have a more broad concern and contribution to their organization.

Unbalanced approaches include components of both of the balanced approaches. For example, in underinvestment, the employer desires flexible and expandable behavior by employees, like they would in a mutual investment relationship. However, the employer also attempts to retain flexibility in employment decisions. In another unbalanced approach, which is overinvestment, the employer provides relatively high employment security, but expects only narrowly specified role behavior in exchange. In a higher education setting, underinvestment could happen when contingent instructional staff members are expected to be concerned about students and the institution even though they are not given any security. An example of overinvestment could be seen when a faculty member is granted tenure based on their research products only.

Social exchange theory serves as “a framework for understanding the EOR” (Shore & Coyle-Shapiro, 2003, p. 443) offering a perspective to understand the social aspects of human relations that are “distinguished from strictly economic exchange by the unspecified obligations incurred in and the trust both required for and promoted

by it" (Blau, 1964, p.8) . By providing a framework to understand employees' organizational behaviors, social exchange theory stresses the importance of employees' motivation to achieve organizational goals (Aselage & Eisenberger, 2003).

Table 1

Types of Employee-Organization Relationship

Approaches	Types			
A. Balanced exchange	A-1. A pure economic exchange model (quasi-spot contract)	• free to hire and fire workers • market-like flexibility • employer offers short-term, purely economic inducements in exchange for well-specified contributions by the employee • neither party has an obligation to maintain a long-term relationship • appropriate when a performance contribution can be clearly defined and measured	A-2. A combined economic and social exchange model (mutual investment)	• develops and encourages employees to adopt expandable work roles • offers some degree of employment security • a clan-like flexibility • employees' obligations and contributions may include jobs that fall outside of prior agreements or expertise • employees are expected to learn firm-specific skills and willing to consider organization's interests as important as their core job duties
	• Obligations of each party are either narrow and specified or broad and open-ended. • Obligations of each party are matched.			
B. Unbalanced exchange	B-1. Under-investment	• employer desires flexible and expandable work behavior by employees but attempts to retain flexibility to hire and fire immediately	B-2. Over-investment	• employer provides relatively high employment security to employees but expects only narrowly specified role behavior in exchange
	• Obligations of each party are not matched.			

Adapted from Tsui et al. (1997)

Unlike economic transactions, social exchange refers to the voluntary actions of individuals who are motivated by the indefinite returns they are expected to induce. It

entails unspecified, broad, open-ended obligations from both employer and employee (Blau, 1964) and requires that relationships pursuing reciprocal commitment be established on trust. Therefore, it is difficult to apply economic principles to behaviors that were engendered by factors such as personal obligations, gratitude, and trust.

Perceived organizational support. Three major concepts derived from social exchange framework—Perceived Organizational Support (POS), Psychological Contract Theory (PCT), and Leader-Member Exchange (LME)—are central to understanding employment relationships (Coyle-Shapiro & Conway, 2004). According to Eisenberger, Huntington, Hutchison, and Sowa (1986), POS offers an elaborated view on the exchange between employees and their employers. Whereas organizational commitment focuses on individuals' commitment to an organization, POS refers to employees' general perception of the extent to which an organization values employees' contributions and cares about their well-being. Employees' commitment to an organization in strongly influenced by what they perceive as commitment from the organization. In order to expect mutual commitment from employees, in response to the organization's commitment, employees need to perceive support from their organization as discretionary actions—the ones purposefully made regardless of circumstantial influences (Eisenberger, Jones, Aselage, & Sucharski, 2004). If they perceive the support as unplanned or not deliberate, employees do not give the same degree of credit to it.

POS serves as an important socio-emotional indicator in employment relationship. It is significantly related to positive outcomes, both at the individual (e.g. job satisfaction and positive mood at work) and the organizational level (e.g. affective commitment, performance, and decreased withdrawal behavior). Employees who

were well treated by their organizations were more likely to be affectively committed to them, show better performance, and are less likely to quit their jobs (Meyer & Allen, 1984; Mowday, Porter, & Steers, 1982). Research indicates that POS and job satisfaction operate as cognitive and emotional processes through which organizational commitment is induced (Yoon & Thye, 2002). POS is positively associated with both affective commitment (emotional attachment to organization) (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; L. Rhoades & Eisenberger, 2002) and normative commitment (belief in or loyalty to employer) (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002) of employees. Increased POS induces more commitment to employers and their priorities, helping the organizations reach their goals (Eisenberger et al., 1986).

Johnsrud and Rosser (2002) and Rosser (2004a) reported that faculty's perceptions of their worklives—including reward, benefits, administrative relations, and organizational support——had direct impact on their morale and potentially on their intentions to leave. According to a study on women and minority faculty in a research-intensive university (Olsen, Maple, & Stage, 1995), in particular, factors such as perceived institutional support, relationship with department, and work context were more predictive of job satisfaction than what their contract officially stated. Ambrose, Huston, and Norman (2005) also noted, in their interview study, that even faculty who were successful achievers in their academic field may not feel supported by their colleagues and their institution, indicating the need to pay specific attention to an institutional context. Demographic characteristics (e.g. age, gender, education, and tenure) had little relationship with POS.

POS offers a more solid framework for understanding employees' behaviors than

organizational commitment because it examines organizational support as perceived by employees themselves. According to Shore and Wayne (1993), employees who feel they are supported by their organizations tend to engage in behaviors that are beneficial to their organizations voluntarily, in return, whereas their affective commitment—based on emotional attachment and identification with the goals of the organizations—may not sustain those behaviors. Behaviors that are in a positive relationship with POS include not only standard job activities but also extra-role actions favorable to an organization, such as aiding fellow employees, taking actions that protect one's organization from a risk, offering constructive suggestions, and gaining knowledge and skills beneficial to it (George & Brief, 1992).

A meta-analysis of over 70 studies on POS by L. Rhoades and Eisenberger (2002) reported that antecedents associated with POS involved several components such as supervisor support, fairness, organizational rewards, and favorable job conditions. Perceptions about their supervisors or leaders of the organization were significant in POS. Levinson (1965) suggested that employees tend to personify their organizations and identify the actions of the agents of their organizations with the actions of the organization itself. The relationship between perceived supervisor support and POS, therefore, increased as the supervisors who influenced them were in higher ranks (Eisenberger, Stinglhamber, Vandenberghe, Sucharisk, & Rhoades, 2002).

In particular, according to Shore and Shore (1995), repeated fair treatment is also likely to have a significant, cumulative effect on POS. Fairness, discussed in terms of distributive and procedural justice, refers to impartial distribution of outcomes and procedures that were made judiciously and in a non-discriminative manner (Greenberg, 1990). Procedural justice may have a stronger influence on POS than

distributive justice because occasions such as promotions and pay raises—related to distributive justice—occur less frequently than the occasions such as a decision-making process and regular performance evaluation, which constitute procedural justice(Shore & Shore, 1995; Wayne, Shore, Bommer, & Tetrick, 2002). The higher the status supervisors hold in their organization, the stronger the influence made on POS by their fair or unfair treatment (Eisenberger et al., 2004).

Research on contingent faculty's perceptions of their organizations' support and the relationship among the organizational support and other workplace attitudes has been limited. Umbach (2008, Nov) found, using social exchange and psychological contract theory, that part-time faculty were less committed to teaching and spent less time in advising students due to the lack of support from their organization. Wyatt-Nichol (2007) also reported a preliminary analysis of the level of job satisfaction, POS, and the quality of exchange relationship among tenured, tenure-track, and contingent faculty groups: TTTF had higher levels of satisfaction and POS than contingent faculty. Overall, contingent faculty's worklives have been mostly understood from a deficit model, assuming that their low pay or lack of job security would be negatively related to teaching performance or other professional duties (Kezar & Sam, 2011). While this approach has certain validity, it nevertheless neglects considering the motivational power deriving from their professional identities from graduate training experience and socialization into the academic community as teaching staff. An informed understanding based on data could provide a more balanced perspective on contingent faculty's employment relationship in academic workplaces.

Workplace attitudes. In this section, workplace attitudes such as organizational commitment and job satisfaction are discussed. Attitudes are defined as regular patterns of individual feelings, thoughts and predispositions as a response to certain aspects of the environment (Secord & Backman, 1969). According to Arnold et al. (2010), attitudes are directed toward certain objects such as a person (e.g. supervisor), object (e.g. organization) or concept (e.g. pay). Self-report questionnaires are most often used to assess them. Among the attitudes related to workplace psychology, organizational commitment and job satisfaction have been of much interest and were widely researched.

Organizational commitment. Whereas job satisfaction is defined as one's attitude toward certain aspects of his or her job, organizational commitment is a broader concept, referring to employees' degree of overall affective attachment to his or her employing organization(Mowday & Steers, 1979). Organizational commitment is defined as "a state of affairs where individuals are strongly attracted to (committed to) the goals, values, and objectives of their employer" (Steers, 1977, p. 115). It indicates an employee's overall attitude toward an organization including identification with it, involvement in it (Mowday et al., 1982; Williams & Hazar, 1986), and influence from it (Meyer & Herscovitch, 2001). According to Meyer and Allen (1997)'s three-component model, components of organizational commitment consist of (1) affective commitment (emotional attachment to organization), (2) normative commitment (belief in or loyalty to employer), and (3) continuance commitment (perceived cost of leaving). As organizational commitment is based on a reciprocal exchange relationship between individuals and organizations, employees' commitment is highly related to perceptions of organization's commitment to them (Eisenberger et al., 1986).

Organizational commitment is positively related to both individual and organizational outcomes such as job satisfaction, job performance (Mathieu & Zajac, 1990), organizational effectiveness, and lower intention to leave and turnover (Meyer & Herscovitch, 2001). Smeenk, Teelken, Eisinga, and Doorewaard (2009)'s study of university faculty in six European countries found that the quality of job performance is mediated by the organizational commitment of faculty. According to a longitudinal study, organizational commitment predicted one's intention to remain in a job better than job satisfaction did (Porter, Steers, Mowday, & Boulian, 1974).

With respect to faculty, disciplines and seniority are significant factors in understanding their organizational commitment. According to a study from a stratified random sample of 40 research universities, Neumann and Finaly-Neumann (1990) found that the faculty's commitment to their university was dependent on disciplinary fields and career stages. While reward was a strong predictor for faculty commitment in hard sciences, social support (e.g. emotional concern, information, and appraisal) was a more important predictor for those in soft sciences. Commitment to university was the highest among senior faculty members whereas no difference was found between early-career and mid-career stages, supporting social exchange theory that the organizational commitment of faculty was commensurate with the reward or support they received. D.C. Feldman and Turnley (2001) also found that contingent faculty who were in their late career stages tended to be more satisfied with their jobs and committed to their professions.

Organizational commitment has been one of the most frequently researched topics related to contingent work, with regard to whether contingent employees were more or less committed to their organizations than their permanent counterparts (Connelly

& Gallagher, 2004; Coyle-Shapiro & Kessler, 2000; McDonald & Makin, 2000; Pearce, 1993; Van Dyne & Ang, 1998). According to studies, the level of organizational commitment of contingent employees varied: lower than permanent employees (Coyle-Shapiro & Kessler, 2000; Van Dyne & Ang, 1998), higher (McDonald & Makin, 2000) or equal as them (Pearce, 1993). These mixed results suggested that several personal, organizational factors were related to their commitment (Coyle-Shapiro & Kessler, 2002). For example, contingent employees showed more commitment and engagement when they were treated fairly and when appropriate organizational support was offered (Liden, Wayne, Kraimer, & Sparrowe, 2003).

Job satisfaction. As one of the major indicators of organizational effectiveness (Cameron, 1978) and productivity (Likert, 1961, 1967; Mayo, 1963; McGregor, 1960), job satisfaction refers to "pleasurable, emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values" (Locke, 1969, p. 364). Kalleberg (1977) identified six different dimensions of job satisfaction in intrinsic and extrinsic realms. Intrinsic dimension includes the degree to which work itself is interesting and motivating. Extrinsic dimension refers to other work-related conditions such as financial reward, career opportunities, autonomy and convenience related to work, relationships with other coworkers, and resources available to workers.

Though a consistent causal relationship is not always definite, a significant, positive relationship exists between job satisfaction and productivity (Cherrington, Reitz, & Scott, 1971; Groves, Kahalas, & Lamb, 1976; Wanous, 1974). Research indicates that higher satisfaction tends to result in higher organizational productivity

(Katzell, Yankelovich, Fein, Ornati, & Nash, 1975; Voorde, Veldhoven, & Paauwe, 2009). Job satisfaction was reported to be the highest when workforce showed the highest productivity (Katzell, Barrett, & Parker, 1961). Satisfaction also influences variables closely related to performance such as job withdrawal (Hulin, 1991) and organizational commitment (Mottaz, 1987). Job satisfaction, commitment, and performance are associated with one another (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989; O'Reilly & Chatman, 1986).

In regards to the job satisfaction of faculty, Hagedorn (2000)'s framework of faculty job satisfaction has identified individual and environmental characteristics that are associated with it. These are categorized as mediators and triggers: Mediators include 1) job characteristics (salary, level of achievement, and amount of responsibility), 2) demographics (individual: gender and ethnicity, institutional: institutional type and discipline), and 3) environmental conditions (relationships with colleagues, administrators, and students). Triggers refer to life events such as divorce, life and career stage changes, and perception of workplace justice.

According to Schuster and Finkelstein (2006), the general satisfaction level of faculty has declined during the past three decades for both men and women. The reasons for this decline are attributable, in part, to increasing pressures for research publications and dissatisfaction with salary level. In response to the deteriorating faculty morale at national level, several studies investigated the relationship among factors related to faculty satisfaction using nation-wide data sets (Johnsrud, 2002; Johnsrud & Rosser, 2002; Rosser, 2004b, 2005).

Gender, ethnicity, career stages, ranks, and union status were important factors in understanding faculty satisfaction. Women faculty were less satisfied with their salary,

benefits, and overall job regardless of their part-time or full-time status (Seifert & Umbach, 2008; Toutkoushian & Bellas, 2003), at various degrees, depending on their disciplines (Seifert & Umbach, 2008). Part-time women faculty also reported lower satisfaction with their advancement opportunities, job security, and salary than male counterparts (Toutkoushian & Bellas, 2003).

Faculty satisfaction and stress level varied, depending on their career stages, indicating a particular need for recognition and collegial support for early-stage faculty on tenure track who have mounting pressures for tenure review (Olsen, 1993). According to Johnson (2009)'s study based on an institution-wide survey at a large public research university in the Midwest, professors at different ranks had distinctive factors related to their overall satisfaction (e.g. assistant professor: satisfaction with the quality and collegiality of their coworkers and department chair support; associate professors: satisfaction with pay level; and full professors: satisfaction with pay and work-family conflict). Lastly, union status was negatively related to faculty satisfaction (Myers, 2011).

Research indicates the relationships among workplace attitudes and performance are not as close among temporary employees, who frequently change their jobs and maintain their contingent status, as permanent employees (Marler, Barringer, & Milkovich, 2002). Controlling for demographic variables, part-time workers were likely to have lower satisfaction than full-time employees, but some attitudes were reported to be higher depending on organizational structures, policies, reward system, and the level of trust among organizational members (Eberhardt & Shani, 1984). Little has been known, however, about how their personal motivation to do contingent work impacts their job attitudes and performance (Connelly & Gallagher, 2004)

although the intrinsic reward they find from teaching was also reported to be significant for their satisfaction. In Gappa and Leslie (1993)'s interview study, a part-time faculty member shared the satisfaction from the intrinsic commitment to teaching as follows, "[Part-time faculty] are uncluttered with the responsibilities of full-time faculty. All we do is teach, and we have the time to do it well" (p.41).

Student Ratings of Teaching

Teaching is the primary role that a majority of contingent faculty perform. It is, therefore, viable to examine how their teaching performances are viewed by students. Although students may have biases themselves as evaluators, they are the ones who are present in the classes throughout the semester and capable to judge the course materials, instruction qualities, instructor's feedback and their attitudes towards students. Students' evaluations can offer an important piece of information on their satisfaction about instructors' teaching in classrooms (Theall & Franklin, 2001). In this section, characteristics of exemplary teaching performance and student evaluation of teaching—as a form of assessing teaching performance—are discussed.

Teaching performance. Teaching performance refers to what teachers do on the job to impart knowledge or skills. It is specific to their job situations and organizational contexts (Darling-Hammond, Wise, & Pease, 1983). According to the policy document of the university, where this present study was conducted, it is more broadly defined that "teaching is not limited to classroom instruction. It includes extension and outreach education, and other forms of communicating knowledge to both registered university students and persons in the extended community, as well as supervising, mentoring, and advising students" (University of Minnesota, 2007, p. 11).

Teaching performance is an intricate process itself, and it has not been given as much priority as research in evaluating faculty performance (Schulz, Meade, & Khurana, 1989). Kerr (1995) stated that, under the promotion and reward system weighted heavily towards quantifiable research and publications, university faculty may be easily driven to value their research behaviors and products more than teaching behaviors and products, possibly spending less time on class preparation. The board of regents of the institution where this study was conducted requires that review of faculty performance for their tenure decision be done with "reasonable indices of acceptable performance in each of the areas (e.g., teaching contributions and evaluation, scholarly productivity, service, governance and outreach activities)" (University of Minnesota, 2007, p. 15). Every instructor, regardless of one's rank or title, is required to distribute student evaluation forms in class which, when completed, are submitted to the department head. SRT of contingent faculty are considered at a departmental level for continuation or dismissal of their contracts.

Several characteristics and attitudes of excellent teachers suggest standards for evaluating teaching. Crawford and Bradshaw (1968) found that the four most frequently mentioned characteristics of effective college teachers were as follows: 1) comprehensive knowledge of the subject matter, 2) well-organized lectures, 3) enthusiastic teaching styles, and 4) student-oriented manners and attitudes. Musella and Rusch (1968) also reported that expert knowledge of subject area, ability to explain clearly, enthusiastic attitude toward subject, and ability to encourage thinking characterized teaching behaviors that most engaged students.

Tang (1997) identified twelve predictors of teaching effectiveness, from student evaluations of 126 business faculty at a public higher education institution. These

include clear presentation of content, answers to questions, courteous attitude toward students, and preparedness. Studies on the multidimensionality of student evaluation of teaching by Marsh (1987) have identified nine consistent factors of effective teaching performance: learning/value, instructor enthusiasm, organization/clarity, group interaction, individual rapport, breadth of coverage, examination/grading, assignments/readings, and workload/difficulty. According to a sequential mixed-methods analysis of 912 undergraduate and graduate students' teaching evaluations at a public university, four meta-themes (communicator, advocate, responsible, and empowering) and nine themes (responsive, enthusiastic, student-centered, professional, expert, connector, transmitter, ethical, and director) were reported to indicate effective teachers (Onwuegbuzie et al., 2007). Lastly, in Watson (2011)'s study on a multifaceted predictive model with student evaluation data (n=7,365), overall instructor score, overall course score, and student's self-assessed learning score were most influenced by whether the instructor motivated them with enthusiasm to want to learn about the subject. These studies suggest that good college teachers are not only knowledgeable but also approachable and engaging in their classrooms.

Student evaluations of teaching. Martin and Berry (1969) identified three approaches for evaluating teaching performance including "direct, objective measures of the professor's teaching accomplishments; or indirect subjective estimates of his performance in this role; … or judgments on criteria which do not directly apply, but which are considered to be functionally related to the teacher's role performance" (p. 698). According to Seldin (1984, 1988), sources of measuring teaching performance include multiple options such as classroom observation, analysis of audio or videos of classes, self-evaluation, review of instructional materials, long-term follow-up of

student performance, alumni opinions, and student enrollments in elective courses. Among these options, SRT—which started as a private form of evaluation between students and teachers in classrooms—has been one of the most commonly used methods to assess students' satisfaction with the quality of teaching (Cohen, 1981; Marsh, 1984, 1987; Seldin, 1993).

Student evaluations of teaching have multiple labels—Teacher Ratings Forms (TRFs), Teacher Course Evaluations (TCEs), Student Ratings of Teaching Effectiveness (SRTEs), or Student Ratings of Instructions (SRIs). They are extensively used in higher education institutions in North America as well as around the world (Abrami, Theall, & Mets, 2001; Seldin, 1993). Student evaluation of teaching has grown into a more public means of communication, particularly in large institutions. It was used to inform students of classes and teachers, to give feedback information to teachers on their classroom performance for improvement, and to influence further decisions on their employment status and programs (CommitteeOnUndergraduateTeaching, 1968).

Early studies on student evaluation of teaching date back to 1950s. The first student rating forms were distributed in the University of Washington. Guthrie (1954) found correlations of .87 and .89 between students' ratings of their teachers in two consecutive years. Lovell and Haner (1955) reported a correlation of .89 in a survey of students' opinions of their teachers with a two-week's interval. Also favorably supporting the stability of student ratings, one of the early studies on student evaluation of teaching found internal consistency correlation of .93 from 16 different courses (Spencer & Aleamoni, 1970). Marsh (1987) later supported the reliability in students' ratings of teaching with his extensive review of research findings.

Over time, student evaluation of teaching has matured in its methodological rigor to provide administrators and faculty members with some distinct information regarding the quality of faculty teaching and even some information about student learning. Research indicated that student evaluation of teaching reflected some information about students' learning. For example, Cohen (1987) reported statistically significant mean correlations, between students' achievement and components of student evaluation of teaching, from .55 for instruction structure to .45 for overall instructor score.

Multisection validity studies have also indicated considerable correlation between student ratings of teaching and student achievement as measured by examination performance (Abrami, d'Apollonia, & Cohen, 1990; d'Apollonia & Abrami, 1997). Student ratings of teaching do have validity to some extent; teachers who were evaluated highly by their students are likely to be teachers whose students learned the best (McKeachie, 1969). Lastly, according to Kulik's (2001) extensive review of literature on student evaluation of teaching, researchers generally agree that student evaluation results acceptably, although not perfectly, affirm the results of the four most commonly used measures of teaching effectiveness—student learning, student comments, alumni ratings, and outsider observations of teaching.

Demographic characteristics of students, such as age, sex, student's grade, and veteran-non veteran status, were found to make little difference in their ratings, but graduate students tended to rate their teachers higher than undergraduates (Remmers, 1930; Remmers & Elliot, 1949). Instructors who do not hold M.A. or Ph.D. were rated lower than those who do, and older instructors tended to be rated lower than younger teachers (Riley, Ryan, & Lifshitz, 1950). In regards to class characteristics,

there are both results that class size and required/elective status were not correlated with student ratings (Goodhartz, 1948; Marsh, 1987) or negatively correlated.

In a study at Grinnell College, classes with over 30 students were rated lower by their students than smaller classes. Required courses were also rated lower than elective ones (Lovell & Haner, 1955). According to Theall and Franklin (2001), certain conditions such as being large, required, and out-of-major courses may contribute to lower ratings compared to being elective, upper-level, and in-major courses. Not necessarily because teaching qualities were lower in former conditions but because these conditions may make accomplishment of effective teaching and learning more difficult. For a sensible use of student evaluation data, therefore, characteristics such as class size, disciplinary contexts, and electivity would need to be considered (D. C. Feldman, 1978).

Although student evaluation of teaching has been extensively used in colleges and universities in the U.S. over several decades, little is known about the effects these evaluations have on campuses. Nevertheless, research indicates that feedback obtained from SRT forms provide teachers with information to improve their teaching performance, especially when accompanied by consulted strategies for enhancement (Kulik, 2001). It can also provide administrators with an even more reliable assessment of instructional performance when complemented with self-evaluation, peer-evaluation and administrative information (Brandenburg & Slinde, 1977). Lastly, student evaluation data can provide much needed information when used with other institutional data, but they have been often far from being used in any complementary manner (Theall & Franklin, 2001). Few research-intensive universities have attempted to use student-oriented teaching data to follow up teaching performance across the

types of teaching staff (Cross & Goldenberg, 2009). Monitoring the teaching qualities of contingent faculty with these data, however, could suggest some dependable guidance for policies for their teaching.

Some studies indicate that the growing presence of contingent faculty is negatively related to student outcomes (Ehrenberg & Zhang, 2005; Jaeger & Eagan, 2011a), but the majority of such studies have focused on aggregate institutional-level outcome variables such as graduation, retention, and transfer rates. Even when some selected educational variables related to their teachings were studied, such as the degree of interaction a faculty member has with students (Umbach, 2007) and teaching styles (Baldwin & Wawrzynski, 2011; Umbach, 2008, Nov), the quality of teaching performance of contingent faculty has not been examined from students' perspective. Students' rating of their contingent faculty's performance is, however, often considered at a departmental level for continuation or dismissal of their contracts. Since contingent faculty's teaching performance is regularly evaluated by students in the same manner as TTTF, how students are satisfied with their teaching could suggest some pieces of information regarding their qualities as teachers.

Chapter 3: Method

The purpose of this dissertation was to understand the relationships among perceptions of organizational support and workplace attitudes as well as to examine SRT results of contingent and TTTF. The primary constructs of interests were 1) perception of workplace support, 2) job satisfaction, and 3) affective organizational commitment. They were measured using data from three iterations of a biennial employee survey at a large land-grant public research university in the Midwest.

Although studies using national-level data have made significant contributions to the research on faculty worklives by identifying key factors, the importance of institution-specific studies have also been advocated (Ambrose et al., 2005; Johnsrud, 2002; Johnsrud & Rosser, 2002). For instance, Johnsrud (2002) suggested that a unit-specific or an institution-specific approach to examine employees' worklives could enliven and highlight the context, which is often neglected in the studies using nationally collected data samples. Johnson (2009) also found that satisfaction with university characteristics was significant in faculty satisfaction, across ranks, indicating the importance of understanding an institutional context in the studies of faculty worklives. In the following, participants, instrumentation, and procedures were presented.

Participants

The participants of this study are faculty and instructional staff who answered institutional worklife surveys in 2008, 2010, or 2012 at the central campus of a large public research university with very high research activity. The survey was distributed

to employees at or over 50 percent FTE since 2004 to have an understanding of employees' worklives every two years. The populations of interest in this study are, therefore, TTTF and contingent faculty who have teaching evaluation data and work at more than 50 percent FTE (Full-Time Equivalent) statuses. The original survey was administered to employees who work at over 50 percent FTE only. Although the primary interest group of this study is contingent faculty, including term faculty and instructional staff, TTTF were also included as a comparison group.

Institutional context. The data of this study were collected from "a large, land-grant, multi-campus system with one urban flagship campus and four additional campuses located in five different geographic regions" (Carrier & Wilhelmson, 2013, p. 1). There are approximately 90,000 students, faculty, and staff members (Carrier & Wilhelmson, 2013). Only the largest campus's faculty and instructional staff were included in the study because of the differences in HR policies and systems in separate campuses.

Over the past few decades, due to the demands to meet various instructional needs with flexibility, the institution adopted a personnel system that allowed each college to make a decision of its instructional staffing ratio in categories as follows: 1) regular faculty (tenured and tenure track faculty), 2) term faculty[3] (contract, temporary and

[3] Term faculty refer to a group of researchers and professors who are not on the tenure-track. Their contracts are renewed yearly or for multiple years. Their roles may not be limited to only teaching and may include research depending on what their contracts require, but they are increasingly hired for teaching these days. The titles for term faculty include: 1) Contract Faculty (Assistant Professor, Associate Professor, Professor, Teaching Assistant Professor, Teaching Associate Professor, and Clinical Assistant Professor), 2) Adjunct Professor (Adjunct Assistant Professor, Adjunct Associate Professor, Adjunct Professor, and Adjunct Instructor), 3) Instructor, and 4) Research Professor/Fellow. According to Carrier and Wilhelmson (2013), this group of professionals called term faculty were given titles in order to distinguish them from TTTF and instructional staff.

visiting), 3) term faculty (adjunct or clinical), 4) instructional academic professional staff[4] and 5) graduate teaching assistants. By policy, the proportion of non-TTTF was restricted to below 25 percent of the number of TTTF, but with allowance for exceptions when an additional supplemental plan was submitted. This collegiate personnel plan is monitored by the Provost's office and a major faculty committee to allow room for flexibility while maintaining accountability (Carrier & Wilhelmson, 2013).

Table 2

Response Rate by Year

	TTTF		Contingent Faculty		All	
	Total	n (% within TTTF)	Total	n (% within contingent FA)	Total	N (% within all FA)
2008	1,352	578 (42.8%)	383	116 (30.3%)	1,735	694 (40.0%)
2010	1,485	602 (40.5%)	770	185 (24.0%)	2,255	787 (34.9%)
2012	1,449	528 (36.4%)	861	227 (26.4%)	2,310	755 (32.7%)
Total	4,286	1,708 (39.9%)	2,014	521 (25.9%)	**6,300**	**2,229(35.4%)**

Out of 6,300 faculty and instructional staff who were invited to the survey—in 2008, 2010, and 2012—and had SRT data, a total of 2,229 (35.4%) answered the survey (see Table 2 above). The majority of respondents were TTTF (1,708, 76.6%) and less than a quarter of them (521, 23.4%) were contingent faculty. The inferential power of surveys is gained from measuring groups of people who are expected to represent the larger population, and it is hard to accomplish perfection in sampling

[4] Instructional academic professional staff members refer to employees whose primary roles are teaching students. The job titles for instructional staff include: 1) Teaching specialist/Senior Teaching Specialist, 2) Lecturer/Senior Lecturer/Lecturer, and 3) Research Associate/Specialists. Graduate teaching assistants were not included in the population of this study because their teaching experiences are regarded as part of their graduate education.

(Groves et al., 2004) . In the case of this survey, although the survey was initially distributed to all employees, like a census, rather than to pre-designed sampled groups, retrospective examination was made by the author to ensure the similarity of respondents with the population and was confirmed that they were representative.

Demographic characteristics of the survey respondents such as gender and ethnicity were compared between contingent faculty and TTTF population—who were invited to the survey and had SRT— and those who answered the survey and had SRT to ensure that the responded groups adequately represent the original NTTTF and TTTF populations. Information was obtained from both the survey and the HR system using the given survey number unique to individuals each year. Lastly, sample sizes for contingent faculty (n=306) and TTTF (n=336) were calculated based on the population size, at 0.05 confidence level by using a sample size calculation program, and were randomly drawn from each numbered responded group using a random number generating program to have samples that have enough statistical power.

Instrumentation

The main objectives of this institution-wide survey were to periodically collect data on the perceptions and attitudes of faculty and staff in their workplaces and to allow improvement of their work experiences through institutional and college level reporting. The questionnaire developed by faculty members and administrators at management school originally consists of over 70 questions regarding workplace attitudes and perceptions about the institution and its practices as well as work/life balance and personal well-being (see Appendix A). For this study, survey data from 2008 through 2012 were selected because of consistency in the questionnaire format

and wording. The questionnaire formats have remained essentially consistent since 2008 except for a few minor changes in wordings and reduction in the number of items. To examine the relationships among organizational support and workplace attitudes such as organizational commitment and job satisfaction, scales that measured these constructs were selected (see Table 3 below).

Organizational support—employees' general perceptions of the extent to which an organization values their contributions and cares about their well-being—by supervisors was measured using existing scales introduced by Greenhaus, Parasuraman, and Wormley (1990). The eleven items about supervisory support include sentences such as "My department chair or responsible administrator takes the time to learn about my career goals and aspirations," "… makes sure I get the credit when I accomplish something substantial on the job," and "…gives me helpful feedback about my performance." Because items adopted from Survey of Perceived Organizational Support (SPOS) (Eisenberger et al., 1986; Eisenberger et al., 2004; L. Rhoades & Eisenberger, 2002) were not asked to faculty but to staff only, perceptions of support at work setting for faculty and instructional staff were measured through items asking to what extent they perceived that they were supported at work, which consisted of 13 items such as "In my current work setting, I am supported in efforts to be innovative," "to perform high quality work," "recognized for achievement," and "rewarded for achievement." Perceptions of organizational support and supervisory support were both measured with a 5-point scale where 5 is strongly agree (strongly disagree, disagree to some extent, uncertain, agree to some extent, and strongly agree).

For job satisfaction—referring to the pleasurable, emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job

values—measurement, the Job Descriptive Index (JDI) (Smith, Kendall, & Hulin, 1969) was used to examine employees' satisfaction in work, coworkers, and supervisor/responsible administrator. Each category of job satisfaction with work, supervisors, and coworkers was assessed with five items that describe the conditions (satisfying or challenging) or characteristics (helpful, intelligent, or responsible) with the answering options of "Yes, Not sure, or No" in agreement or disagreement to them (see Table 3 above). Satisfaction with pay and benefits was measured with a 5-point scale from the Pay Satisfaction Questionnaire developed by Heneman and Schwab (1985), where 5 is "Strongly agree", in five different dimensions of satisfaction with pay such as level, benefits, raises, structure and administration. Internal reliability of the measures was tested and presented in the last column in Table 3. Internal reliability was generally acceptable ranging between .75 and .95. The internal reliability for supervisor support and support in work setting was the highest each at .95 and .94.Satisfaction with pay and benefits (.89), supervisors(.83), coworkers (.78), and work (.75) were also acceptable.

For measuring dependent variables, one of the global satisfaction items ("Overall, I am satisfied with my employment at the university") was used for overall satisfaction. For organizational commitment—a state of affairs where individuals are strongly attracted to (committed to) the goals, values, and objectives of their employer—, a question "If I were doing it again, I would accept a position at the University" was used to measure the extent to which an employee is affectively committed to an organization. Both overall satisfaction and affective organizational commitment were measured with a 5-point scale where 5 is strongly agree (strongly disagree, disagree to some extent, uncertain, agree to some extent, and strongly agree).

Table 3

Scales Related to Organizational Support, Affective Organizational Commitment, and Job Satisfaction

Constructs	Questions in the survey	Response coded	Internal consistency reliability
Perception of Organizational Support	Support from department chair or responsible administrator: My department chair or responsible administrator… a. takes the time to learn about my career goals and aspirations b. cares about whether or not I achieve my goals c. keeps me informed about different career opportunities for me in the University d. makes sure I get the credit when I accomplish something substantial on the job e. gives me helpful feedback about my performance f. gives me helpful advice about improving my performance when I need it g. supports my attempts to acquire additional training or education to further my career h. provides assignments that give me the opportunity to develop and strengthen new skills i. provides me special projects that increase my visibility in the University j. is understanding when I have an unexpected family or personal problem k. is supportive of my efforts to balance work and personal needs	Strongly disagree=1 Disagree=2 Uncertain=3 Agree=4 Strongly agree=5	.95
	Support in work setting: In my current work setting, I am… a. supported in efforts to be innovative b. supported in efforts to perform high quality work c. supported in efforts to demonstrate respect toward individuals in the University community d. supported in efforts to provide high quality service e. supported in efforts to be collaborative and have a team orientation f. supported in efforts to adapt and change g. supported in efforts to promote a sense of a common University community h. supported in efforts to be results oriented i. supported in efforts to operate with integrity and comply with ethical practices j. supported in efforts to promote diversity of ideas, experiences, and people k. supported in efforts to promote work for the good of society l. recognized for achievement m. rewarded for achievement	Strongly disagree=1 Disagree=2 Uncertain=3 Agree=4 Strongly agree=5	.94

(continued to the next page)

Table 3 (Continued)

Constructs	Questions in the survey	Response coded	Internal consistency reliability
Job Satisfaction	Satisfaction with work: a. Gives me sense of accomplishment b. Dull (R)[a] c. Satisfying d. Uninteresting (R)[a] e. Challenging	Yes=3,Not sure=1, No=0	.75
	Satisfaction with Supervisor: a. Praises good work b. Annoying (R)[a] c. Tactful d. Bad (R)[a] e. Up-to-date	Yes=3,Not sure=1, No=0	.83
	Satisfaction with Coworkers: a. Helpful b. Boring (R)[a] c. Intelligent d. Lazy (R)[a] e. Responsible	Yes=3,Not sure=1, No=0	.78
	Satisfaction with pay and benefits: a. My benefit package b. My most recent raise c. My current salary d. The University's pay structure. e. My overall level of pay f. The value of my benefits. g. Consistency of the University's pay policy h. How my raises are determined i. Difference in pay among jobs in the University j. My salary relative to the salaries of colleagues in my department	Very dissatisfied=1 Dissatisfied=2 Neither satisfied nor dissatisfied=3 Satisfied=4 Very satisfied=5	.89
Overall Satisfaction	Overall I am satisfied with my employment at the University.	Strongly disagree=1Disagree=2 Neither agree nor disagree=3 Agree=4 Strongly agree=5	NA
(Affective) Organizational commitment	If I were doing it again, I would accept a position at the University.		

[a] R *indicates reversed coding for items that were negatively worded so that a high value indicates the same type of response in every item.*

Other demographic variables included are as follows (see Appendix B): age, gender, ethnic background, educational level, couple status, partner employment status, years in the institution, and reasons for working at the university. Age was re-coded from 1 (20s) to 6 (70s or over). Gender was re-coded as a dummy variable (Women: 1, Men: 0). All non-white ethnic groups were re-coded as minority (1) and the white was as 0. The educational level was also re-coded as graduate or professional degree (1) and the rest (0). Marital status was re-coded as coupled (married, same-sex domestic partner, living with a significant other or partner) (1) and the rest (0).

For partner employment status, those who were coupled and had employed partners were re-coded as 1 and those who were coupled and whose partners were unemployed as 0 to identify sole breadwinner status. Years in the institution was re-coded from 1 (less than 5 years) to 6 (over 40 years). Reason for working at the university was re-coded into five subcategories (belief in university mission, enjoy work, environment, pay/benefits, and lack of alternatives). Response to more than one category was allowed in the original questionnaires, and each category was re-coded as a dummy variable.

The reason to work for the university was included since little is known about how motivation to do work, under contingent work conditions, impacted their job attitudes and performance (Connelly & Gallagher, 2004). In this study, this would mean working in a non-tenure track position. Gender and ethnicity have been consistently reported as influential in faculty's perception of job satisfaction (Olsen et al., 1995; Rosser, 2004a) whereas some demographics such as age, gender, educational level, and tenure have shown little relationship with POS.

Table 4 below shows the statements in the SRT form that students answer in their evaluation of instructors and their learning near the end of the semester. They choose their answers from a score range of 1 (strongly disagree) to 6 (strongly agree). Every instructor, regardless of one's rank or title, is required to distribute this form in class and to submit responses to the department.

Table 4

Student Ratings of Teaching (SRT) Items

Statement in the SRT	Scale
The instructor was well prepared for class.	1 Strongly disagree
The instructor presented the subject matter clearly.	2 Disagree
The instructor provided feedback intended to improve my course performance.	3 Somewhat disagree
The instructor treated me with respect.	4 Somewhat agree
I have a deeper understanding of the subject matter as a result of this course.	5 Agree
My interest in the subject matter was stimulated by this course.	6 Strongly agree

SRT was designed by the university's Office of Measurement Services (OMS) and has been used to measure students' perceptions of their instructors, in terms of their preparedness, presentation, feedback, and respectful attitudes, and their learning and interest in the subject. The format has remained consistent since its major revision in 2008 (see Appendix F). The collected SRT data was then sorted by the size of class (e.g. under 10: small-size class, 10 to under 30: medium-size class, 30 to under 50: large-size class, and over 50: mega-size class). Whether students took a particular class because it was required, a choice from among several required classes, or as an elective was also considered in the descriptive analysis (see Table 14 to 21) because

existing literature has indicated that these factors are often relevant to the results of students ratings of teaching. A majority of instructors had more than one SRT data set because they taught more than one class a semester/year when the survey was administered.

When a teacher taught more than one class, classes were treated separately because aggregating results from different types or sizes of classes was not desirable although the same instructor taught them all. The mean was used to represent the result of SRT value for each of the six items in SRT and was compared between contingent faculty and TTTF in the same size groups. One of the most significant advantages of using the mean among the measures of central tendency is that it can be used algebraically. Moreover, sample means are more stable indicators of the central tendency of population than sample medians or modes (Howell, 2007).

Procedures

To collect these data, the Office of Human Resources (OHR) sent official invitation letters to all faculty and staff who were eligible, in partnership with the Office of Institutional Research (OIR) which is responsible for data management and reporting. Messages from the Vice President of OHR encouraged invitees to take the survey that examines their worklives in the university (see Appendix C), followed by four more emails to remind and encourage participation. This web-based self-administered survey was sent to official campus email account of each eligible employee, and all communications regarding the survey were made via emails because it was the primary communication channel at the university. Survey consent was included in the first pages of the introduction (Appendix E). After survey data

were collected, they were re-coded for the purpose of this study (see Appendix B). SRT data of all instructors who were invited to the institution-wide survey were collected, using survey ID number, by a staff member at OMS under the request and approval for a research purpose.

Chapter 4: Data Analysis Results

For contingent faculty and TTTF, t-tests, correlations and stepwise multiple regressions were done to examine the relationships among variables of demographics, organizational support, job satisfaction, and organizational commitment. Standardized coefficients were computed through a series of multiple regression analyses to explain the relationships among primary concepts of this study: perception of organizational support, job satisfaction, and organizational commitment. Demographics (e.g. age, gender, ethnicity, length of employment in the institution, the highest level of education, couple status, and sole breadwinner status) were also considered to examine their relations to deciding the variances of overall job satisfaction and affective organizational commitment. Descriptive analyses of the samples are presented, first followed by the distributions of classes taught by contingent faculty and TTTF, based on class size, required/elective status, and the majority of students who take classes. Second, workplace attitudes, perception of organizational support, and SRT were compared between contingent faculty and TTTF. Lastly, correlations among variables and stepwise regression analyses results are presented.

Descriptive Analysis

Demographic. Information such as 1) gender, 2) age, 3) ethnicity, 4) length of employment at the university, 5) education level, 6) couple status, and 7) employment status of spouses or partners were compared between contingent faculty and TTTF. First, as presented in Table 5 below, more than half of contingent faculty were women whereas less than half of TTTF were women (Contingent FA: 57.2% women; TTTF:

40.6% women). By contrast, less than half of contingent faculty were men whereas more than half of TTTF were men (Contingent FA: 42.8% men; TTTF: 59.4% men). Particularly, among instructional staff, women's presence was more pronounced than men (59.8% women;40.2% men). There was almost an equal presence between men and women among term faculty (50.6% men; 49.4% women). Lastly, there was a slightly higher percentage of women among tenure-track faculty than among tenured faculty (Tenure track faculty: 44.4% women; Tenured faculty: 39.5% women).

Table 5

Sample Distribution, by Gender

		Men	Women	Subtotal
Contingent Faculty	Term Faculty	39 (50.6%)	38 (49.4%)	77 (100%)
	Instructional Staff	92 (40.2%)	137 (59.8%)	229 (100%)
	Subtotal	131 (42.8%)	175 (57.2%)	306 (100%)
TTTF	On Tenure Track	40 (55.6%)	32 (44.4%)	72 (100%)
	Tenured	159 (60.5%)	104 (39.5%)	263 (100%)
	Subtotal	199 (59.4%)	136 (40.6%)	335 (100%)

Table 6 below presents the distribution of contingent faculty and TTTF in six age categories. For both groups, nearly half of the samples were in their 40s or 50s (contingent faculty: 50.3%, TTTF: 49.6%). A slightly higher proportion of contingent faculty were in their 20s or 30s (22.2%) than TTTF (17.0%). On the other hand, TTTF (19.1%) had slightly higher percentages in the age groups of 60s and 70s or over than contingent faculty (17.0%). According to Table 7, the mean of contingent faculty group's age was lower than that of TTTF (Contingent FA: 48.4 years old; TTTF: 50.5 years old). The youngest contingent faculty in the sample was 25 years old (TTTF: 29 years old), whereas the oldest was 79 years old (TTTF: 77 years old). The median of contingent faculty's age was 49 years old (TTTF: 50 years old).

Table 6

Sample Distribution, by Age Category

		20s	30s	40s	50s	60s	70s or over	Choose not to answer	Subtotal
Contingent Faculty	Term Faculty	1 (1.3%)	13 (16.9%)	23 (29.9%)	17 (22.1%)	18 (23.4%)	1 (1.3%)	4 (5.2%)	77 (100%)
	Instructional Staff	8 (3.5%)	46 (20.1%)	52 (22.7%)	62 (27.1%)	27 (11.8%)	6 (2.6%)	28 (12.2%)	229 (100%)
	Subtotal	9 (2.9%)	59 (19.3%)	75 (24.5%)	79 (25.8%)	45 (14.7%)	7 (2.3%)	32 (10.5%)	306 (100%)
TTTF	On Tenure Track	2 (2.8%)	45 (62.5%)	21 (29.2%)	1(1.4%)	0 (0.0%)	0 (0.0%)	3 (4.2%)	72 (100%)
	Tenured	0 (0.0%)	10 (3.8%)	69 (26.2%)	75 (28.5%)	52 (19.8%)	12 (4.6%)	45 (17.1%)	263 (100%)
	Subtotal	2 (0.6%)	55 (16.4%)	90 (26.9%)	76 (22.7%)	52 (15.5%)	12 (3.6%)	48 (14.3%)	335 (100%)

Table 7

Comparison of Age of Contingent Faculty and TTTF

	N		Mean	Median	Std. Deviation	Range	Minimum	Maximum
	Valid	Missing						
Contingent Faculty	274	32	48.42	49	11.33	54	25	79
TTTF	303	32	50.45	50	11.05	48	29	77

Note: Numbers (except for N) indicate years.

Contingent faculty (82.4%, n=252) and TTTF (81.5%, n=273) were both dominantly white (see Table 8 below). Whereas the presence of non-white ethnic groups was thinly dispersed among several groups such as American Indian or Alaskan Native (1.3%, n=4), Asian or Pacific Islander (3.6%, n=11), Black or African American (2.3%, n=7), Hispanic/Latino (4.2%, n=13), Nonresident Aliens (2.6%, n=8), and Two or more races (1.0%, n=3) in contingent faculty; the proportion of Asian or Pacific Islander (13.4%, n=45) was higher than the rest of the ethnic groups combined (Black or African American (1.8%, n=6), Hispanic/Latino (3.0%, n=10), and non-resident aliens (0.3%, n=1)) among TTTF. Among all ethnic groups, the presence of Asian or Pacific Islander (33.3%, n=24) was the most noticeable in the tenure-track faculty group, accounting for a third of the total.

The distribution of contingent faculty and TTTF in their length of employment at the university indicates characteristics about each group (see Table 9 below). For example, more than half of the contingent faculty worked for less than ten years at the university (Term faculty: 52.8%; Instructional staff: 55.8%). On the other hand, nearly three quarters of tenured faculty worked for the university more than ten years, likely due in part to the job security that comes with tenure. As being on tenure-track status implies, the majority of tenure-track faculty worked at the university for less than five years (61.5%) or five to ten years (33.8%).

According to Table 10, over 90 percent of contingent faculty (n=274) had a graduate or professional degree. The proportion of those who held graduate or professional degree was even higher among term faculty (96.1%, n=73) than instructional staff (88.9%, n=201). All tenure track-faculty had a graduate or professional degree.

Table 8

Sample Distribution, by Ethnicity

		American Indian/ Alaskan Native	Asian/Pacific Islander	Black or African American	Hispanic/ Latino	Non-resident Alien	Two or more races	White	Un-known	Sub-total
Contingent Faculty	Term Faculty	0 (0.0%)	3 (3.9%)	3 (3.9%)	3 (3.9%)	1 (1.3%)	0 (0.0%)	66 (85.7%)	1 (1.3%)	77 (100%)
	Instructional Staff	4 (1.7%)	8 (3.5%)	4 (1.7%)	10 (4.4%)	7 (3.1%)	3 (1.3%)	186 (81.2%)	7 (3.1%)	229 (100%)
	Subtotal	4 (1.3%)	11 (3.6%)	7 (2.3%)	13 (4.2%)	8 (2.6%)	3 (1.0%)	252 (82.4%)	8 (2.6%)	306 (100%)
TTTF	On Tenure Track	0 (0.0%)	24 (33.3%)	3 (4.2%)	4 (5.6%)	1 (1.4%)	0 (0.0%)	40 (55.6%)	0 (0.0%)	72 (100%)
	Tenured	0 (0.0%)	21 (8.0%)	3 (1.1%)	6 (2.3%)	0 (0.0%)	0 (0.0%)	233 (88.6%)	0 (0.0%)	263 (100%)
	Subtotal	0 (0.0%)	45 (13.4%)	6 (1.8%)	10 (3.0%)	1 (0.3%)	0 (0.0%)	273 (81.5%)	0 (0.0%)	335 (100%)

Table 9

Sample Distribution, by Length of Employment at the University

		Under 5 years	5 to under 10 years	10 to under 20 years	20 to under 30 years	30 to under 40 years	Over 40 years	Subtotal
Contingent Faculty	Term Faculty	22 (31.4%)	15 (21.4%)	21 (30.0%)	9 (12.9%)	2 (2.9%)	1 (1.4%)	70 (100%)
	Instructional Staff	61 (28.6%)	58 (27.2%)	67 (31.5%)	20 (9.4%)	7 (3.3%)	0 (0.0%)	213 (100%)
	Subtotal	83 (29.3%)	73 (25.8%)	88 (31.1%)	29 (10.2%)	9 (3.2%)	1 (0.4%)	283 (100%)
TTTF	On Tenure Track	40 (61.5%)	22 (33.8%)	3 (4.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	65 (100%)
	Tenured	11 (4.6%)	54 (22.8%)	71 (30.0%)	57 (24.1%)	31 (13.1%)	13 (5.5%)	237 (100%)
	Subtotal	51 (16.9%)	76 (25.2%)	74 (24.5%)	57 (18.9%)	31 (10.3%)	13 (4.3%)	302 (100%)

Table 10

Sample Distribution, by Educational Level

		College graduate or some graduate school	Graduate or professional degree	Choose not to answer	Subtotal
Contingent Faculty	Term Faculty	3 (3.9%)	73 (96.1%)	0 (0.0%)	76 (100%)
	Instructional Staff	19 (8.4%)	201 (88.9%)	6 (2.7%)	226 (100%)
	Subtotal	22 (7.3%)	274 (90.7%)	6 (2.0%)	302 (100%)
TTTF	On Tenure Track	0 (0.0%)	72 (100%)	0 (0.0%)	72 (100%)
	Tenured	7 (2.7%)	256 (97.3%)	0 (0.0%)	263 (100%)
	Subtotal	7 (2.1%)	328 (97.9%)	0 (0.0%)	335 (100%)

[a] Graduate or professional degree examples: MBA, M.A., M.D., Ph.D., and J.D.

Table 11

Sample Distribution, by Couple Status

		Single	Coupled	Divorced or separated	Widowed	Choose not to answer	Subtotal
Contingent Faculty	Term Faculty	0 (0.0%)	73 (97.3%)	1 (1.3%)	0 (0.0%)	1 (1.3%)	75 (100%)
	Instructional Staff	0 (0.0%)	207 (91.2%)	9 (4.0%)	3 (1.3%)	8 (3.5%)	227 (100%)
	Subtotal	0 (0.0%)	280 (92.7%)	10 (3.3%)	3 (1.0%)	9 (3.0%)	302 (100%)
TTTF	On Tenure Track	9 (12.5%)	58 (80.6%)	3 (4.2%)	0 (0.0%)	2 (2.8%)	72 (100%)
	Tenured	22 (8.4%)	221 (84.0%)	12 (4.6%)	3 (1.1%)	5 (1.9%)	263 (100%)
	Subtotal	31 (9.3%)	279 (83.3%)	15 (4.5%)	3 (0.9%)	7 (2.1%)	335 (100%)

[a] "Coupled": "married" or "has a partner"

Table 11 above presents the couple status of contingent faculty and TTTF. The majority of contingent faculty were either married or had a partner (92.7%, n=280), whereas a lower proportion of TTTF were coupled (83.3%, n=279). There were none who were single in the contingent faculty in the sample. On the other hand, over 10 percent of on-tenure-track faculty (12.5%, n=9) were single. Slightly less than 10 percent of tenured faculty were also single (8.4%, n=22).

Table 12

Sample Distribution, by Employment Status of Spouses or Partners

		Employed	Unemployed	Subtotal
Contingent Faculty	Term Faculty	54 (85.7%)	9 (14.3%)	63 (100%)
	Instructional Staff	133 (70.4%)	56 (29.6%)	189 (100%)
	Subtotal	187 (74.2%)	65 (25.8%)	252 (100%)
TTTF	On Tenure Track	46 (63.9%)	26 (36.1%)	72 (100%)
	Tenured	152 (57.8%)	111 (42.2%)	263 (100%)
	Subtotal	198 (59.1%)	137 (40.9%)	335 (100%)

The distribution of the employment status of spouses or partners in contingent faculty and TTTF also presents another interesting comparison between the groups. According to Table 12 above, nearly three quarters of contingent faculty had spouses or partners who were employed, whereas only a quarter of them had spouses or partners who were unemployed (employed: 74.2%; unemployed: 25.8%). Term faculty had the highest rate (85.7%) of having employed spouses or partners among all faculty groups. When compared with gender distribution, more term faculty men were likely to have working spouses or partners than in other faculty groups.

SRT distributions. The distribution of courses from which SRT of contingent faculty and TTTF were collected are presented below by their size. Each table shows how different sizes of classes (small: less than 10 students; medium: 10-30; large: 30-

50; and mega: more than 50) were taught by contingent faculty and TTTF. For each size of classes, the distribution of classes was decided by the type of the majority of students (lower level: freshmen/sophomore; middle level: sophomore/junior; upper level: junior/senior; and graduate courses) and the status of the classes (required, required but one of several choices, and elective). Except in Table 13, every percentage is based on the total number of classes in each size taught by contingent faculty or TTTF.

Table 13

SRT Distributions, by Class Size

	Small	Medium	Large	Mega	Subtotal
Contingent Faculty	121 (10.3%)	774 (66.1%)	161 (13.8%)	115 (9.8%)	1,171 (100%)
TTTF	226 (28.3%)	381 (47.7%)	97 (12.2%)	94 (4.8%)	798 (100%)
				Total	1,969

The number of classes taught by contingent faculty in the sample is 1,171 and 798 for TTTF. The majority of the courses taught by contingent faculty were medium size (see Table 13 above). Approximately two thirds of classes that contingent faculty teach are medium-size ones (the number of students between 10 and 30) as presented in Table 13 above. The percentages of other courses they teach are nearly equally distributed among small (10.3%), large (13.8%) and mega-size (9.8%) classes. Nearly half of the classes that TTTF teach are also medium-size ones (47.7%), but approximately a third of them are small-size ones (less than 10 students in a class).

Table 14

Small-Size Classes, by Contingent Faculty

	Level								Subtotal	
	Lower		Middle		Upper		Grad			
Required	7	(5.8%)	8	(6.6%)	19	(15.7%)	39	(32.2%)	73	(60.3%)
Required, but one of several choices	1	(0.8%)	4	(3.3%)	2	(1.7%)	3	(2.5%)	10	(8.3%)
Elective	0	(0.0%)	2	(1.7%)	27	(22.3%)	9	(7.4%)	38	(31.4%)
subtotal	8	(6.6%)	14	(11.6%)	48	(39.7%)	51	(41.8%)	121	(100%)

[a] Lower: Freshmen/Sophomore
Middle: Sophomore/Junior
Upper: Junior/Senior

Table 15

Small-Size Classes, by TTTF

	Level								Subtotal	
	Lower		Middle		Upper		Grad			
Required	0	(0.0%)	4	(1.8%)	13	(5.8%)	76	(33.6%)	93	(41.2%)
Required, but one of several choices	0	(0.0%)	0	(0.0%)	15	(6.6%)	24	(10.6%)	39	(17.3%)
Elective	6	(2.7%)	0	(0.0%)	19	(11.1%)	69	(30.5%)	94	(41.6%)
subtotal	6	(2.7%)	4	(1.8%)	47	(20.8%)	169	(74.8%)	226	(100%)

[a] Lower: Freshmen/Sophomore
Middle: Sophomore/Junior
Upper: Junior/Senior

According to Table 14 above, over 80 percent of small-size classes taught by contingent faculty were classes for juniors/seniors (39.7%) or graduate students (41.8%). Required graduate courses and upper elective courses each took 32.2 percent and 22.3 percent of all small-size classes by contingent faculty. The small-size courses taught by TTTF is even more centered on courses for graduate students (see Table 15

above). Nearly three quarters of all small size classes taught by TTTF were for graduate students. Required courses (41.2%) and elective courses (41.6%) were two equally primary types of small-size courses offered by TTTF.

Table 16

Medium-Size Classes, by Contingent Faculty

	Level								Subtotal	
	Lower		Middle		Upper		Grad			
Required	141	(18.2%)	73	(9.4%)	126	(16.3%)	79	(10.2%)	419	(54.1%)
Required, but one of several choices	49	(6.3%)	42	(5.4%)	106	(13.7%)	5	(6.5%)	202	(26.1%)
Elective	46	(5.9%)	28	(3.6%)	42	(5.4%)	37	(4.8%)	153	(19.8%)
subtotal	236	(30.5%)	143	(18.9%)	274	(35.4%)	121	(15.6%)	774	(100%)

[a] Lower: Freshmen/Sophomore
Middle: Sophomore/Junior
Upper: Junior/Senior

Table 17

Medium-Size Classes, by TTTF

	Level								Subtotal	
	Lower		Middle		Upper		Grad			
Required	11	(2.9%)	15	(3.9%)	72	(18.9%)	64	(16.8%)	162	(42.5%)
Required, but one of several choices	11	(2.9%)	7	(1.8%)	73	(19.2%)	23	(6.0%)	114	(29.9%)
Elective	17	(4.5%)	5	(1.3%)	30	(7.9%)	53	(13.9%)	105	(27.6%)
subtotal	39	(10.2%)	27	(7.1%)	175	(45.9%)	140	(36.7%)	381	(100%)

[a] Lower: Freshmen/Sophomore
Middle: Sophomore/Junior
Upper: Junior/Senior

In Table 16 above, classes for juniors/seniors (35.4%) and freshmen/sophomores (30.5%) each accounted for approximately a third of all medium-size classes. More than half of them (54.1%) were required courses. Over a quarter of them (26.1%) were one of several choices of required courses. Among the medium size classes, classes for juniors/seniors (45.9%) and graduate students (36.7%) were two most common types of courses taught by TTTF (see Table 17 above).

Table 18

Large-Size Classes, by Contingent Faculty

	Level								Subtotal	
	Lower		Middle		Upper		Grad			
Required	10	(0.6%)	16	(9.9%)	47	(29.2%)	28	(17.4%)	101	(62.7%)
Required, but one of several choices	4	(2.5%)	2	(1.2%)	18	(11.2%)	1	(0.6%)	25	(15.5%)
Elective	10	(6.2%)	7	(4.3%)	9	(5.6%)	9	(5.6%)	35	(21.7%)
subtotal	24	(14.9%)	25	(15.5%)	74	(46.0%)	38	(23.6%)	161	(100%)

[a] Lower: Freshmen/Sophomore
Middle: Sophomore/Junior
Upper: Junior/Senior

Table 19

Large-Size Classes, by TTTF

	Level								Subtotal	
	Lower		Middle		Upper		Grad			
Required	8	(8.2%)	3	(3.1%)	27	(27.8%)	14	(14.4%)	52	(53.6%)
Required, but one of several choices	3	(3.1%)	3	(3.1%)	23	(23.7%)	2	(2.1%)	31	(32.0%)
Elective	1	(1.0%)	-		4	(4.1%)	9	(9.3%)	14	(14.4%)
subtotal	12	(12.4%)	6	(6.2%)	54	(55.7%)	25	(25.8%)	97	(100%)

[a] Lower: Freshmen/Sophomore
Middle: Sophomore/Junior
Upper: Junior/Senior

The distribution of large-size classes taught by contingent faculty and TTTF showed a similar pattern (see Table 18 and Table 19 above). In both cases, the largest percentage was for classes for juniors/seniors (contingent faculty: 46.0% and TTTF: 55.7%) followed by graduate courses (contingent faculty: 23.6% and TTTF: 25.8%). Although the percentage of required courses in large-size classes was higher for contingent faculty (62.7%) than TTTF (53.6%), the share of one of several required courses was higher for TTTF (32.0%) than contingent faculty (15.5%).

Table 20

Mega-Size Classes, by Contingent Faculty

	Level								Subtotal	
	Lower		Middle		Upper		Grad			
Required	19	(16.5%)	39	(33.9%)	19	(16.5%)	7	(6.1%)	84	(73.0%)
Required, but one of several choices	5	(4.3%)	5	(4.3%)	5	(4.3%)	-		15	(13.0%)
Elective	11	(9.6%)	1	(0.9%)	4	(3.5%)	-		16	(13.9%)
subtotal	35	(30.4%)	45	(39.1%)	28	(24.3%)	7	(6.1%)	115	(100%)

[a] Lower: Freshmen/Sophomore
Middle: Sophomore/Junior
Upper: Junior/Senior

Table 21

Mega-Size Classes, by TTTF

	Level								Subtotal	
	Lower		Middle		Upper		Grad			
Required	11	(11.7%)	12	(12.8%)	26	(27.7%)	8	(8.5%)	57	(60.6%)
Required, but one of several choices	8	(8.5%)	3	(3.2%)	11	(11.7%)	1	(1.1%)	23	(24.5%)
Elective	9	(9.6%)	1	(1.1%)	3	(3.2%)	1	(1.1%)	14	(14.9%)
subtotal	28	(29.8%)	16	(17.0%)	40	(42.6%)	10	(10.6%)	94	(100%)

[a] Lower: Freshmen/Sophomore
Middle: Sophomore/Junior
Upper: Junior/Senior

Lastly, the two largest shares of mega-size classes taught by contingent faculty were for sophomores/juniors (39.1%) and freshmen/sophomores (30.4%). On the other hand, classes for juniors/seniors (42.6%) was the most common among mega-size classes taught by TTTF, followed by classes for freshmen and sophomore (29.8%). The majority of classes were required ones (contingent faculty: 73%; TTTF: 60.6%) (see Table 20 and Table 21 above).

Depending on class size and course enrollee level, there was a different focus in the types of courses that TTTF and contingent faculty taught, except in large-size (30-50 students) classes where the most common level of classes that both TTTF and contingent faculty taught were for juniors/seniors. For example, approximately 75 percent of small-size classes that TTTF taught were graduate level whereas contingent faculty taught small-size classes for junior/senior students (39.7%) and graduate students (41.8%) at nearly an equal proportion. For medium-size (10-30 students) classes, TTTF taught courses mostly for juniors/seniors (45.9%) and graduate students (36.7%). Contingent faculty mostly taught classes containing juniors/seniors (35.4%) and freshmen/sophomore (30.5%). More than half of mega-size classes taught by contingent faculty were for freshmen/sophomores (30.4%) and sophomores/juniors (39.1%), whereas the mega-size classes that was most taught by TTTF contained juniors/seniors (42.6%), followed by freshmen/sophomores (29.8%). Overall, contingent faculty tended to teach more undergraduate and lower division courses, whereas TTTF tended to teach more graduate level and upper division courses.

Statistical Comparisons between Contingent Faculty and TTTF

In this section, to decide if the difference between the means of contingent faculty and TTTF are statistically significant in several measures used in this study (workplace attitudes, perception of organizational support, and SRT), independent samples t-tests were conducted. The purpose of independent samples t-test was to find whether the difference between the means of contingent faculty and TTTF samples was large enough to support the conclusion that they were from different populations or not. If the t-values were statistically significant, they were not from the same population. T-test results of workplace attitudes, perception of organizational support, and SRT of contingent faculty and TTTF are presented below.

Workplace attitudes and perception of organizational support. According to Table 22 below, contingent faculty and TTTF had statistically significant differences in satisfaction with work and satisfaction with coworkers. The mean of satisfaction with work for contingent faculty (2.71) was slightly higher than TTTF (2.43). Satisfaction with coworkers was also higher for contingent faculty (2.69) than TTTF (2.31) and was statistically significant at the.001 level. Affective commitment (accept the position in the university if doing again) was higher for contingent faculty (4.18) than TTTF (4.00) at the .05 level. There was no statistically significant difference in the means of satisfaction with responsible administrator, satisfaction with pay/benefits, and overall satisfaction between contingent faculty and TTTF.

Regarding the perception of organizational support, both perception of being supported at work and perception of supervisory support were included. Contingent faculty's mean (3.88) was statistically significantly higher than TTTF's mean (3.68) at .01 level for perception of being supported at work (see Table 23 below). There was

no difference in the perception of supervisory support between contingent faculty and TTTF at a statistically significant level.

Table 22

Workplace Attitudes, Contingent Faculty vs. TTTF

	Group				
	Contingent Faculty		TTTF		t-
	m	SD	m	SD	
Satisfaction with work	2.71	0.58	2.43	0.60	***
Satisfaction with responsible administrator	2.36	0.82	2.37	0.88	
Satisfaction with coworkers	2.69	0.62	2.31	0.67	***
Satisfaction with pay/benefits	2.90	0.74	3.02	0.82	
Overall satisfaction	3.93	1.00	3.94	1.07	
Affective commitment	4.18	0.92	4.00	1.08	*

*p< 0.05 **p< 0.01 ***p< 0.001

Note: Satisfaction with work, responsible administrator, coworkers scale range: 0-3
Satisfaction with pay/benefits, overall satisfaction, and affective commitment scale range: 1-5

Table 23

Perception of Organizational Support, Contingent Faculty vs. TTTF

	Group				
	Contingent Faculty		TTTF		t-
	m	SD	m	SD	
Perception of being supported at work	3.88	0.80	3.68	0.93	**
Perception of supervisory support	3.49	1.01	3.62	1.02	

*p< 0.05 **p< 0.01 ***p< 0.001

Note: Scale range: 1-5

Student Ratings of Teaching. The results of the SRT group means for six statements in the SRT and the averaged total mean are presented below for each class size by contingent faculty and TTTF. On a scale from 1 (strongly disagree) to 6

(strongly agree), the mean was used to represent the central tendency of students' evaluation of their instructors and courses for the following six items:

"The instructor was well prepared for class,"

"The instructor presented the subject matter clearly,"

"The instructor provided feedback intended to improve my course performance,"

"The instructor treated me with respect,"

"I have a deeper understanding of the subject matter as a result of this course,"

"My interest in the subject matter was stimulated by this course."

Table 24

SRT: Small-Size Classes, Contingent Faculty vs. TTTF

	Group				
	Classes taught by contingent faculty (N=191)		Classes taught by TTTF (N=260)		t
	M	SD	M	SD	
1. Well prepared	5.50	0.57	5.57	0.45	
2. Clear presentation	5.35	0.70	5.39	0.55	
3. Provided feedback	5.41	0.73	5.36	0.56	
4. Respectful attitude	5.66	0.47	5.75	0.30	*
5. Deeper understanding	5.46	0.56	5.54	0.41	
6. Interest stimulated	5.34	0.67	5.45	0.47	
Overall	5.45	0.54	5.51	0.38	

*p< 0.05 **p< 0.01 ***p< 0.001

Note: Scale range: 1-6

Results presented in Table 24 through 27 suggest that students were generally satisfied with the instruction regardless of the size of classes. Whereas there were few statistically significant differences in small and mega-size classes between contingent faculty and TTTF, SRT means for contingent faculty were slightly higher than TTTF, at statistically significant levels, in medium and large-size classes. Although there

were few noticeable mean difference in small size classes, TTTF had a slightly higher mean in ‘respectful attitude’ (TTTF: 5.75 vs. contingent faculty: 5.66) at a statistically significant level ($p< .05$) (see Table 24 above).

Table 25

SRT: Medium-Size Classes, Contingent Faculty vs. TTTF

	Group				
	Classes taught by contingent faculty (N=855)		Classes taught by TTTF(N=409)		t
	M	SD	M	SD	
1. Well prepared	5.59	0.41	5.50	0.47	**
2. Clear presentation	5.38	0.51	5.18	0.65	***
3. Provided feedback	5.37	0.51	5.11	0.60	***
4. Respectful attitude	5.65	0.35	5.59	0.40	*
5. Deeper understanding	5.42	0.46	5.28	0.56	**
6. Interest stimulated	5.19	0.56	5.09	0.64	**
Overall	5.43	0.42	5.29	0.51	***

*$p< 0.05$ **$p< 0.01$ ***$p< 0.001$

Note: Scale range: 1-6

As seen above in Table 25, SRT means for contingent faculty were all higher and statistically significant than TTTF in medium-size (10-30 students) classes. Means were higher in ‘clear presentation’ (contingent faculty: 5.38 vs. TTTF: 5.18) and ‘provided feedback intended to improve my course performance’ (contingent faculty: 5.37 vs. TTTF: 5.11) at a statistically significant level ($p< .001$). The means were also higher for ‘well prepared’ (contingent faculty: 5.59 vs. TTTF: 5.50), ‘I have a deeper understanding of the subject matter as a result of this course’ (contingent faculty: 5.42 vs. TTTF: 5.28), ‘interest stimulated’ (contingent faculty: 5.19 vs. TTTF: 5.09) ($p< .01$), and ‘respectful attitudes’ (contingent faculty: 5.65 vs. TTTF: 5.59) ($p< .05$).

Table 26

SRT: Large-Size Classes, Contingent Faculty vs. TTTF

	Group means				
	Classes taught by contingent faculty (N=165)		Classes taught by TTTF (N=101)		t
	M	SD	M	SD	
1. Well prepared	5.60	0.38	5.56	0.33	
2. Clear presentation	5.38	0.45	5.16	0.55	**
3. Provided feedback	5.21	0.45	4.97	0.47	***
4. Respectful attitude	5.57	0.38	5.56	0.35	
5. Deeper understanding	5.38	0.45	5.24	0.47	*
6. Interest stimulated	5.16	0.55	5.00	0.56	*
Overall	5.38	0.40	5.25	0.41	**

*p< 0.05 **p< 0.01 ***p< 0.001

Note: Scale range: 1-6

Table 27

SRT: Mega-Size Classes, Contingent Faculty vs. TTTF

	Group means				
	Classes taught by contingent faculty (N=116)		Classes taught by TTTF (N=94)		t
	M	SD	M	SD	
1. Well prepared	5.59	0.27	5.54	0.42	
2. Clear presentation	5.21	0.45	5.10	0.66	
3. Provided feedback	4.93	0.50	4.85	0.54	
4. Respectful attitude	5.50	0.44	5.50	0.32	
5. Deeper understanding	5.23	0.38	5.15	0.53	
6. Interest stimulated	4.87	0.54	4.81	0.63	
Overall	5.22	0.39	5.16	0.49	

*p< 0.05 **p< 0.01 ***p< 0.001

Note: Scale range: 1-6

For large-size classes (30-50 students) (see Table 26 above), SRT means were also higher and statistically significant for contingent faculty than TTTF in ‘provided

feedback intended to improve my course performance' (contingent faculty: 5.21 vs. TTTF: 4.97) ($p< .001$), 'clear presentation' (contingent faculty: 5.38 vs. TTTF: 5.16) ($p< .01$), 'deeper understanding' (contingent faculty: 5.38 vs. TTTF: 5.24) and 'interest stimulated' (contingent faculty: 5.16 vs. TTTF: 5.00) ($p< .05$). According to Table 27, there was no statistically significant difference in SRT means between contingent faculty and TTTF in mega-size classes.

Correlations

Demographic, workplace attitudes, and perception of organizational support. Table 28 and Table 29 below, respectively, present correlations of variables for contingent faculty and TTTF. These include dependent variables (overall satisfaction and affective organizational commitment) and independent variables (demographics, workplace attitudes, and perception of organizational support). For contingent faculty (see Table 28), independent variables have low to moderate correlations except for the correlations between satisfaction with department chair and support from department chair (.71) and between support at work and support from department chair (.68). Support from department chair was later excluded in the regression analysis to avoid multicollinearity. Satisfaction with work had statistically significant moderate correlations with: belief in university's mission (.32), satisfaction with department chair (.31), and satisfaction with coworkers (.45) at the .01 level. Satisfaction with coworkers also had a moderate correlation with satisfaction with department chair as well. (.34). Support at work had statistically significant moderate correlations with: satisfaction with work (.33), satisfaction with department chair (.55), satisfaction with coworkers (.42), and satisfaction with pay and benefits (.47) for contingent faculty.

One of the two dependent variables, overall satisfaction, was moderately correlated with: lack of alternatives (-.32), satisfaction with work (.40), satisfaction with department. chair (.33), satisfaction with coworkers (.33), satisfaction with pay and benefits (.56), support from department chair (.45), and support at work (.59). Another dependent variable, accept position again (affective organizational commitment), was also moderately correlated with all workplace satisfaction and support scales. According to the correlation table for contingent faculty, one can

expect that there are some relationships between workplace satisfaction/support scales and overall satisfaction and affective commitment.

Table 29 below presents correlations of variables for TTTF. Among demographic variables, being a minority had moderate negative correlations with age (-.33) and length of employment (-.31) at a statistically significant level ($p < .01$), which means that TTTF from non-white ethnic groups tended to be younger and worked for the university for a shorter period of time than white TTTF. Age was strongly correlated with the length of employment (.78) at a statistically significant level ($p < .05$) for TTTF. Age was later excluded in the regression analysis to avoid multicollinearity.

Moderate correlations were found between: satisfaction with work and satisfaction with coworkers (.57), satisfaction with department chair and satisfaction with coworkers (.30), satisfaction with pay and benefits and support from department chair (.39). The correlation between support at work and support from department chair (.69) was strong at statistically significant level ($p < .01$). Satisfaction with department chair and support from department chair was highly correlated (.74). Support from department chair was later excluded in the regression analysis to avoid multicollinearity. Overall satisfaction (.66) and accept position again (.64) were strongly correlated with support at work.

Table 28

Correlations among Variables, for Contingent Faculty

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Women	--																		
2. Minority	.05	--																	
3. Partner unemployed	-.04	.07	--																
4. Less than grad degree	.02	-.02	.02	--															
5. Age	-.23**	-.13*	.13*	.05	--														
6. Length of employment	.02	-.15*	.08	-.01	.46**	--													
7. Belief in mission	.01	-.06	.02	.00	.00	-.05	--												
8. Enjoy work	.00	-.07	-.06	-.01	.05	.09	.12*	--											
9. Enjoy environment	-.11*	.05	.07	.02	.16*	-.01	-.07	-.12*	--										
10. Enjoy reward	.12*	-.09	-.01	-.02	-.04	-.07	.06	.07	.11	--									
11. lack of alternative	-.08	-.08	-.08	-.01	-.16**	-.07	.00	-.06	.03	.12*	--								
12. Satisfaction with work	-.06	-.03	.00	.03	.11	.05	.01	.32**	-.21**	-.01	-.17**	--							
13. Satisfaction with dept. chair	-.01	.06	-.05	-.07	.05	-.01	.00	.14*	-.16**	.01	-.13*	.31**	--						
14. Satisfaction with coworkers	-.01	-.03	.09	.04	.06	.02	.02	.22**	-.11	-.03	-.11	.45**	.34**	--					

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Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
15. Satisfaction with pay and benefits	-.02	.06	.04	-.04	.04	.09	.06	.24**	-.06	.06	-.23**	.13*	.23**	.18**	--				
16. Dept. chair support	.00	-.02	.02	-.04	.02	.04	.03	.14**	-.17**	.07	-.16**	.22**	.71**	.37**	.34**	--			
17.Suppport at work	.03	-.05	.00	-.06	.01	.02	.10	.26**	-.24**	-.02	-.21**	.33**	.55**	.42**	.47**	.68**	--		
18.Overall satisfaction	-.02	-.01	.03	.05	.06	.12*	.10	.21**	-.22**	.00	-.32**	.40**	.33**	.33**	.56**	.45**	.59**	--	
19. Accept again (affective commitment)	-.01	-.03	.01	.03	.05	.02	.10	.26**	-.23**	.01	-.30**	.39**	.31**	.35**	.49**	.38**	.58**	.74**	--

*$p < .05$; **$p < .01$

(continued from the previous page)

Table 29

Correlations among Variables, for TTTF

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.Women	--																		
2. Minority	.01	--																	
3.Partner unemployed	-.23**	-.05	--																
4.Less than grad degree	-.08	.04	.03	--															
5.Age	-.08	-.33**	.12*	-	--														
6.Length of employment	-.06	-.31**	.12*	.01	.78*	--													
7.Belief in mission	-.01	-.14**	.06	-.03	.24**	.21**	--												
8.Enjoy work	.01	-.10	.00	-.08	.10	.03	.21**	--											
9.Enjoy environment	.03	-.11*	.06	-.16**	-.02	.03	.25**	.23**	--										
10.Enjoy reward	.08	-.23**	.11*	-.07	.07	.11	.16**	.26**	.30**	--									
11.Lack of alternative	.07	-.11*	-.00	.05	-.06	.01	-.19**	-.22**	-.19**	.06	--								
12.Satisfaction with work	-.03	-.12*	-.02	-.04	.14*	.12*	.12*	.17**	.10	.01	-.10	--							
13.Satisfaction with dept. chair	-.04	-.04	.04	-.06	-.03	-.02	.09	.26**	.33**	.16**	-.23**	.19**	--						
14.Satisfaction with coworkers	-.08	-.05	-.04	-.03	.10	.12*	.13*	.13*	.18**	.04	-.19**	.57**	.30**	--					
15. Satisfaction with pay and benefits	-.13*	-.06	.06	-.05	-.08	-.04	.14*	.16**	.17**	.15**	-.17**	.02	.37**	.06	--				

(continued to the next page)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
16. Dept. chair support	-.04	-.03	-.02	-.10	-.07	-.04	.15**	.21**	.36**	.16**	-.21**	.17**	.74**	.31**	.39**	--			
17.Suppport at work	-.11*	.03	.06	-.09	-.01	.02	.22**	.27**	.38**	.16**	-.29**	.16**	.63**	.27**	.60**	.69**	--		
18.Overall satisfaction	-.11*	-.07	.04	-.03	.04	.09	.24**	.40**	.32**	.17**	-.29**	.23**	.49**	.22**	.54**	.45**	.66**	--	
19. Accept again (affective commitment)	-.06	-.09	.04	-.01	.03	.09	.24**	.38**	.36**	.20**	-.32**	.17**	.49**	.26**	.47**	.48**	.64**	.80*	--

*p< .05; **p< .01 *(continued from the previous page)*

Table 30

Comparison between Contingent Faculty and TTTF in Statistically Significant Correlations with Dependent Variables of Overall Satisfaction and Affective Organizational Commitment

Variable	Overall Satisfaction		Affective Organizational Commitment	
	Contingent FA	TTTF	Contingent FA	TTTF
Women	-	-.11*	-	-
Length of employment	.12*	-	-	-
Enjoy work	.21**	.40**	.26**	.38**
Enjoy environment	-.22*	.32**	-.23**	.36**
Belief in mission	-	.24**	-	.24**
Enjoy reward	-	.17**	-	.20**
Lack of alternative	-.32*	-.29**	-.30**	-.32**
Satisfaction with work	.40**	.23**	.39**	.17**
Satisfaction with dept. chair	.33**	.49**	.31**	.49**
Satisfaction with coworkers	.33**	.22**	.35**	.26**
Satisfaction with pay and benefits	.56**	.54**	.49**	.47**
Support at work	.59**	.66**	.58**	.64**

*p< .05; **p < .01; ***p< .001

Table 30 above compares the independent variables that are statistically significantly correlated with overall satisfaction and affective organizational commitment for contingent faculty and TTTF. Although the strength was weak, being a woman was negatively correlated with overall satisfaction for TTTF (-.11) at the .05 level. Length of employment was positively correlated with overall satisfaction for contingent faculty (.12) at the .05 level. No other demographic variable showed statistically significant correlation with neither of dependent variables.

The variables that indicate if the reason for working for the university was because of their belief in university's mission (belief in mission) or because they enjoyed reward they get (enjoy reward) were statistically significantly correlated with overall satisfaction and affective organizational commitment of TTTF only. They did not show any statistically significant correlations for contingent faculty. There were strong correlations between independent variables such as satisfaction with pay and benefits and support at work with dependent variables for both contingent faculty and TTTF.

Although correlations were all statistically significant at the .01 level, there were interesting contrasts in the strength of these correlations between variables such as enjoy work, satisfaction with work, satisfaction with department chair, and satisfaction with coworkers with dependent variables. For example, the variable that indicates if the reason that they chose to work for the university was because they enjoyed the work they do there (enjoy work) and satisfaction with department chair were moderately correlated with both overall satisfaction and affective organizational commitment for TTTF, whereas their correlations were weak for contingent faculty. On the other hand, satisfaction with work and satisfaction with coworkers were moderately correlated with dependent variables for contingent faculty, whereas their correlations were weak for TTTF.

Regression Analysis

To examine what factors significantly relate to the overall satisfaction and affective organizational commitment of contingent faculty and TTTF out of several independent variables, stepwise regressions were conducted. The stepwise regression generates a selection of statistically significant independent variables in the order of importance. The procedure searches for independent variables that correlate with the dependent variable, one at a time, and stops when all significant variables are included. The last model presents the best fitting one that explains the most variance with a series of predictor variables. The variables whose coefficients are not significant at the .05 level are eliminated from the final model.

Table 31 below shows the unstandardized coefficients (*B*), the standard error of that coefficient (*SE B*), the standardized coefficient (β), and the value of the t-test to evaluate how statistically different the coefficient is from zero in overall satisfaction of contingent faculty. The standardized beta coefficients were used to compare the importance of each variable in predicting overall satisfaction because not all independent variables were measured using scales with same ranges of values. At the end of the table are presented multiple correlations (*R*), *R* squares, and adjusted R squares. In total, fifteen independent variables were considered in the stepwise regression. Age and support from department chair were not included to avoid multicollinearity. Control variables include gender, ethnicity, length of employment, and educational level.

From Model 1 to Model 4, the adjusted *R* square changed from .37 to .50; 50 percent of the variance in overall satisfaction was explained, in the sample of contingent faculty, the most by these variables: supported at work, satisfaction with

pay and benefits, satisfaction with work, and lack of alternative job together (see Table 31 below). The overall multiple correlation of .71 is fairly strong. Contingent faculty who have more support at work, satisfaction with pay and benefits, satisfaction with work, and do not have a lack of job alternatives tended to have higher overall satisfaction. No demographical variables that were included were entered in the models.

Table 31

Summary of Stepwise Regression Analysis Using All Predictor Variables to Predict Overall Satisfaction, for Contingent Faculty

VARIABLE	*B*	*SE B*	*β*	*t*
MODEL 1				
Supported at work	.76	.07	.61	11.09***
MODEL 2				
Supported at work	.56	.07	.45	7.78***
Satisfaction with pay and benefits	.45	.08	.35	6.02***
MODEL 3				
Supported at work	.46	.08	.37	6.03***
Satisfaction with pay and benefits	.50	.08	.38	6.67***
Satisfaction with work	.33	.10	.17	3.21**
MODEL 4				
Supported at work	.45	.08	.36	5.96***
Satisfaction with pay and benefits	.47	.08	.36	6.25***
Satisfaction with work	.29	.10	.15	2.82**
Lack of job alternatives	-.32	.11	-.14	-2.78**

Model 1: R = .61 and R^2 = .37 (Adjusted R^2 = .37)
Model 2: R = .68 and R^2 = .46 (Adjusted R^2 = .46)
Model 3: R = .70 and R^2 = .49 (Adjusted R^2 = .48)
Model 4: R = .71 and R^2 = .51 (Adjusted R^2 = .50)
*p< .05; **p< .01; ***p< .001

Table 32

Summary of Stepwise Regression Analysis Using All Predictor Variables to Predict Overall Satisfaction, for TTTF

VARIABLE	*B*	*SE B*	*β*	*t*
MODEL 1				
Supported at work	.76	.05	.66	15.15***
MODEL 2				
Supported at work	.68	.05	.59	13.68***
Enjoy work	.57	.10	.25	5.71***
MODEL 3				
Supported at work	.55	.06	.47	9.08***
Enjoy work	.55	.10	.24	5.63***
Satisfaction with pay and benefits	.26	.07	.20	3.85***
MODEL 4				
Supported at work	.51	.06	.44	8.56***
Enjoy work	.50	.10	.22	5.12***
Satisfaction with pay and benefits	.29	.07	.22	4.30***
Satisfaction with work	.25	.07	.14	3.45**

Model 1: R = .66 and R^2 = .44 (Adjusted R^2 = .43)
Model 2: R = .70 and R^2 = .49 (Adjusted R^2 = .49)
Model 3: R = .72 and R^2 = .52 (Adjusted R^2 = .51)
Model 4: R = .73 and R^2 = .54 (Adjusted R^2 = .53)

*p< .05; **p < .01; ***p< .001

For TTTF (see Table 32 above), 53 percent of the variance in overall satisfaction was explained by: supported at work, enjoy work, satisfaction with pay and benefits, and satisfaction with work. From Model 1 to Model 4, the adjusted *R* square changed from .43 to .53. TTTF who have more support at work, who work at the university because they enjoy the work they do, who are more satisfied with their pay and

benefits and work tended to be more satisfied overall. Support at work, satisfaction with pay and benefits, and satisfaction with work were important variables in explaining overall satisfaction of both contingent faculty and TTTF. No demographical variables that were included were entered in the models.

Table 33

Summary of Stepwise Regression Analysis Using All Predictor Variables to Predict Affective Organizational Commitment, for Contingent Faculty

VARIABLE	*B*	*SE B*	*β*	*t*
MODEL 1				
Supported at work	.68	.06	.60	11.01***
MODEL 2				
Supported at work	.55	.07	.49	8.12***
Satisfaction with pay and benefits	.29	.07	.25	4.11***
MODEL 3				
Supported at work	.45	.07	.41	6.37***
Satisfaction with pay and benefits	.34	.07	.29	4.82***
Satisfaction with work	.32	.10	.19	3.31**

Model 1: R = .60 and R^2 = .36 (Adjusted R^2 = .36)
Model 2: R = .64 and R^2 = .41 (Adjusted R^2 = .41)
Model 3: R = .66 and R^2 = .44 (Adjusted R^2 = .43)

*p< .05; **p< .01; ***p< .001

Table 33 above presents stepwise multiple regression models predicting affective commitment of contingent faculty using variables including their length of employment at the university, gender, minority, employment status of spouses/partners, educational level, reasons for working at the university, and workplace satisfaction and support. In Model 3, the coefficients for supported at work,

satisfaction with pay and benefits, and satisfaction with work were statistically significant (at $p< .001$ level for supported at work and satisfaction with pay and benefits; at $p< .01$ level for satisfaction with work). Supported at work had the strongest coefficient (Standardized beta = .41), followed by satisfaction with pay and benefits (.29) and satisfaction with work (.19). Contingent faculty who perceived that they were supported at work and who were satisfied with their pay and benefits and work tended to have more affective commitment. Together these variables explained 43 percent of the variance in affective commitment. No demographical variables that were included were entered in the models.

In Table 34 below, Model 5 from the stepwise multiple regression presents variables and their coefficients that best predict the variances in affective commitment of TTTF. Compared to Model 1, adjusted R square increased from 42 percent to 51 percent in Model 5. Together, supported at work, the reason for working for the university being because they enjoy their work, lack of job alternatives, being a minority, and satisfaction with coworkers explained more than half of variances. No other demographical variables that were included were entered in the models. The multiple correlation was strong (R = .72). For TTTF, those who are more supported at work (standardized beta = .53, $p< .001$), who work for the university because they enjoy the work they do (standardized beta = .20, $p< .001$) and satisfied with their coworkers (standardized beta = .09, $p< .05$) tended to be more affectively committed to the university and likely to accept the position if they were doing it again. Working for the university because they had a lack of job alternatives (standardized beta = -.14, $p< .01$) and being from minority (non-white) ethnic groups (standardized beta = -.10, $p< .05$) were negatively related to being affectively committed to the institution.

Table 34

Summary of Stepwise Regression Analysis Using All Predictor Variables to Predict Affective Organizational Commitment, for TTTF

VARIABLE	*B*	*SE B*	*β*	*t*
MODEL 1				
Supported at work	.76	.05	.65	14.80***
MODEL 2				
Supported at work	.68	.05	.58	13.29***
Enjoy work	.56	.10	.24	5.53***
MODEL 3				
Supported at work	.64	.05	.55	12.18***
Enjoy work	.52	.10	.22	5.10***
Lack of job alternatives	-.41	.13	-.14	-3.14**
MODEL 4				
Supported at work	.64	.05	.55	12.38***
Enjoy work	.48	.10	.21	4.75***
Lack of job alternatives	-.44	.13	-.15	-3.41**
Minority	-.27	.12	-.10	-2.33**
MODEL 5				
Supported at work	.62	.05	.53	11.68***
Enjoy work	.47	.10	.20	4.67***
Lack of job alternatives	-.41	.13	-.14	-3.17**
Minority	-.27	.12	-.10	-2.30*
Satisfaction with coworkers	.14	.07	.09	2.13*

Model 1: R = .65 and R^2 = .43 (Adjusted R^2 = .42)
Model 2: R = .69 and R^2 = .48 (Adjusted R^2 = .48)
Model 3: R = .71 and R^2 = .50 (Adjusted R^2 = .49)
Model 4: R = .71 and R^2 = .51 (Adjusted R^2 = .50)
Model 5: R = .72 and R^2 = .51 (Adjusted R^2 = .51)

*p< .05; **p < .01; ***p< .001

Chapter 5: Discussions and Conclusion

Summary of the Research Questions and Results

This dissertation examined contingent faculty's workplace attitudes, perception of organizational support, and SRT in comparison with TTTF. The purpose of this dissertation was to understand whether contingent faculty's workplace attitudes, perception of organizational support, and SRT were different from TTTF and to examine how demographic, attitudinal and organizational factors were related to two concepts: overall job satisfaction and organizational commitment. In this study, contingent faculty include contract-based non-tenure track faculty with professorial titles and instructional staff with instructional titles. The following research questions were examined for both contingent faculty and TTTF:

1) Do contingent faculty and TTTF hold different attitudes and perceptions about the workplace and organizational support?

Although it is easily assumed that contingent faculty are likely to be less supported and satisfied in their work environment than TTTF, the comparison of their workplace attitudes with TTTF indicates that their satisfaction with work is higher than TTTF at a statistically significant level. Their satisfaction with coworkers and perception of being supported at work were also higher. Their affective commitment level was slightly higher than TTTF as well. Although these results might be partially attributable to the relatively stable status of contingent faculty in this study (who work for more than 50 percent FTE), they indicate that contingent faculty are also

significant parts of the university who are satisfied with their work, enjoy the community they are in, and are committed to their institution.

2) What factors significantly relate to the overall satisfaction and affective commitment of contingent faculty and TTTF?

Perception of being supported at work was the strongest predictor for explaining both overall satisfaction and affective commitment of contingent faculty. Satisfaction with pay and benefits was the next most significant factor for overall satisfaction and affective commitment of contingent faculty and TTTF. What this indicates is that employees' perception of being supported at work was crucial to their workplace attitudes. Being supported at work does not simply mean better salaries and benefits but whether employees perceive that they are valued and recognized by their organizations or not. Second, for TTTF, in addition to being supported at work, whether the reason they work for the university was because they enjoy what they do or not was significant. This was the second most significant predictor in explaining both of their overall satisfaction and affective organizational commitment. This result indicates that individual motivation to do academic work was closely related to TTTF's satisfaction with employment and commitment. For contingent faculty, next to being supported at work, satisfaction with pay and benefits was the second most significant factor in explaining their overall satisfaction and affective organizational commitment.

If faculty were staying in their jobs because they had nowhere else to go for employment, it had a negative influence on their workplace attitudes. When the reason for remaining at the university was because of a lack of job alternatives, it was

negatively related to overall satisfaction and affective organizational commitment for both contingent faculty and TTTF. Whether or not they chose to work at the university because of their passion for their work or just remained because of a lack of job alternatives was significantly related to their attitudes.

3) Are there differences in how students evaluate the teaching of contingent faculty and TTTF?

SRT results indicate that, overall, students were satisfied with teaching by contingent faculty and TTTF across all sizes of classes. Nevertheless, there were statistically significant differences in SRT means between contingent faculty and TTTF in medium-size (10-30 students) and large-size (30-50 students). Contingent faculty had higher SRT mean results in all areas of SRT items in medium-size classes and in 'class presentation,' 'feedback,' 'deeper understanding,' and 'interest stimulated' in large-size classes than TTTF. These results not only refute the misconception that contingent faculty have too little time to provide students with feedback but also support that they also provide students with good teaching, at least in medium-size and large-size classes.

Implications

Instruction has been a central function in discussing the benefits of public higher education institutions. Particularly, public support of public higher education has often been grounded on this aspect of contribution (Hearn, 1992). Let alone the non-monetary social and political benefits of educated citizenry, both state and students—regardless of degree levels—benefit from students' educational attainment in higher education, including increased tax revenue and economic activities (DesJardins, 2003).Undergraduates, in particular, immensely benefit from their social participation and intellectual interaction in and out of classrooms (Rowley & Hurtado, 2003).

Given these benefits, it is conceivable that the shifts in the instructional staff's qualifications indicate significant changes in academia. With the increase of non-tenure track positions for teaching, teaching is not exclusively the committed act of the professorship but rather, a service provided by a qualified workforce. This trend is commonplace in any type of higher education institution, and with specialization of faculty in research universities, teaching experience and teaching skills are not essential qualifications for one to be employed with tenure in academia, at least in very high research activity /research institutions.

This study has examined the factors that explain the two representative workplace attitudes—overall satisfaction and affective organizational commitment of contingent faculty and TTTF in a public research university. The results show that perceived support at work is the most significant factor in explaining both of these workplace attitudes for both contingent faculty and TTTF. According to this analysis, contingent faculty are more satisfied with their overall work experience and more likely to accept their positions again if given the opportunities when they perceive that they are being

supported by their institutions. This finding is a key to social exchange theory: the more an employer respects and gives to their employees, the more employees hold favorable attitudes toward their institution and invest in it in return, sometimes even in ways that are not explicitly expected or described. Trust built on such experiences leads to benevolent behaviors by employees, behaviors that go beyond their immediate work roles, possibly for the benefit of their institution.

According to this study, contingent faculty's perception of being supported at work was higher than TTTF (contingent faculty: 3.88 vs. TTTF: 3.68). So too was their satisfaction with work (contingent faculty: 2.71 vs. TTTF: 2.43) and satisfaction with coworkers (contingent faculty: 2.69 vs. TTTF: 2.31), at a statistically significant level. Affective commitment was also slightly higher for contingent faculty than for TTTF. These results may indicate that contingent faculty at this particular university are not only satisfied with their work and their relationships with coworkers but in addition, feel supported at their workplace at a comparable level to TTTF. These results are contrary to an existing study that reported lower satisfaction and POS levels for the contingent group (Wyatt-Nichol, 2007). An alternative explanation is that since the contingent faculty in this study all had appointments at 50 percent or higher, they may have experienced more stability than individuals with lower percentage of time appointments.

The factors significant to the overall satisfaction and affective commitment of contingent faculty and TTTF indicate somewhat different combinations of workplace features that may help explain what attracts contingent faculty and TTTF, respectively, to academia and what is important to each group. For example, contingent faculty's overall satisfaction is most explained by combining their perception of being

supported at work, satisfaction with pay and benefits, satisfaction with work, and reasons for working at the university (i.e., a lack of alternatives versus it being the most important aspect). Similarly, for TTTF, the variables of the perception of being supported at work, satisfaction with pay and benefits, and satisfaction with work were also important in explaining overall satisfaction. However, if the reason for working at the university was enjoyment of work tasks, this was the second most significant factor in TTTF's overall satisfaction.

The fact that this motivation variable (that is, if the reason for working at the university was because they love the academic work) is consistently a significant factor in overall satisfaction suggests that for TTTF, whether they are devoted to their academic work is important to their workplace attitudes. The items that tap their love of their work convey a different nuance than simple satisfaction with work. Consider that while one may choose to work at the university because of what is done there generally, this may not suggest that employees are currently satisfied with their own individual set of tasks.

With regard to affective commitment, contingent faculty's affective commitment was, again, explained primarily by the combination of the perception of being supported at work, satisfaction with pay and benefits, and satisfaction with work. For TTTF, if they chose to work at the university because they like the work they do, this was the second most significant factor next to the perception of support at work in determining affective commitment. If they stayed at the university because they lacked job alternatives, however, this factor was negatively related to the organizational commitment of TTTF. Whether they decided to work at the university because they enjoy the work they do or not was a strong predictor in both overall

satisfaction and affective organizational commitment of TTTF.

These results suggest that while both contingent faculty and TTTF share the teaching mission of the university, there are possibly different sources of motivation in their worklives. Whereas satisfaction with work was a significant factor in understanding overall satisfaction and affective commitment of contingent faculty, it was not as significant as the perception of support at work or satisfaction with pay and benefits. On the other hand, for TTTF, satisfaction with pay and benefits was not as important in their overall satisfaction and affective organizational commitment. The reason may be possibly because they were already rewarded at a significant level and given the job security of tenure and thus satisfaction with pay and benefits was not as important as it was for contingent faculty. For contingent faculty, in addition to the perception of support at work, satisfaction with pay and benefits was important in their workplace attitudes as the devotion to academic work in decision of employment at the university was for TTTF.

Large-size, lower-level undergraduate courses are increasingly taught by non-tenure-track teaching faculty or instructional staff in public research universities, as they strive to find ways to accommodate their institutional needs in ways that are most adaptable to their resources and demands. Shrinking state budget contributions were a visible change in the institution where these data were collected although previously it had been ranked as one of those most generously funded land-grant universities by the state (Berman & Pflaum, 2003). Although there are concerns about the negative educational aspects of increasing number of contingent faculty, in this study, contingent faculty were viewed by students as competent teachers especially in medium (10-30 students) and large-size (30-50 students) classes.

There was no statistically significant difference in SRT between contingent faculty and TTTF in small (less than 10 students) and mega-size (over 50 students) classes. Within medium-size class, contingent faculty did have higher SRT mean results than TTTF in all areas of SRT items. Within large-size class, they had higher means in 'class presentation,' 'feedback,' 'deeper understanding,' and 'interest stimulated' than TTTF. These results not only refute the misconception that contingent faculty have too little time to provide students with feedback but also support that they provide students with teaching which is as good as that provided by TTTF, at least in medium-size and large-size classes. A recent study by Figlio et al. (2013, September 1) found that students who were average or less-qualified learn relatively more in their introductory courses from contingent faculty across a wide variety of subject areas. Given that certain conditions, for example, being large, required, and out-of-major courses may contribute to lower ratings than being elective, upper-level, and in-major courses, these attributes may make effective teaching and learning harder (Theall & Franklin, 2001). How contingent faculty apply their teaching strategies, especially in lower level medium to large-size classes, is noteworthy now that students' satisfaction with their teaching was not found to be any lower than teaching by TTTF.

These contingent faculty's roles as teaching experts indicate that their growing presence in public research universities symbolizes an era where short-term contracts for specific performance increasingly complement or replace the life-time employment relationships based on long-time trust and commitment. Organizational support for contingent faculty, however, has not been an established norm in academia in contrast to TTTF who expect, for example, regular reviews and job security at the end of their probationary period. The existing rewards and compensation system are

more aligned with tenure based system.

Although the nature of contracts through which contingent faculty are hired may sound like a purely economic exchange where market-like flexibility exists and employers offers short-term inducements in exchange for well-specified contributions by employees (see Table 1 on p. 24), the nature of what contingent faculty do in institutions is sometimes far from a well-specified performance rubric that is easily measurable and transferrable. Pure economic exchange model is appropriate when a performance contribution can be clearly defined and measured, but in reality, instructors' contributions go beyond measurable achievements only. They not only need to be aware of the unique institutional context where they teach but also be sensitive to students whose characteristics are not identical from class to class. Even if all they do is teach, for a successful connection with students, this role requires more than merely preparing for instructional materials only. For these reasons, a relationship consisting of only short-term monetary rewards and clearly defined outcomes based on a pure economic exchange model may not be an ideal strategy to retain contingent faculty who specialize in teaching.

As Tsui et al. (1997) suggested in the types of employee-organization relationship, a combined economic and social exchange model is one of the balanced approaches that entails both parties' efforts. It is based not only on economic reasons for flexibility but also on the mutual investment of each party so that employees can even perform roles that are necessary for the benefits of their institutions although which were not mandated by their contracts. Teaching is a position that easily requires expandable work roles that go beyond explicit description in contracts, as part of building relationships with students. It is conceivable that contingent faculty will find

support for their teaching and their professional development an important part of investment from their institution.

In the case of this study, the employment relationship of contingent faculty is actually already closer to a combined economic and social exchange model than to a pure economic exchange model or underinvestment model (see Table 1 on p. 24). Their perception of being supported at work and their affective organizational commitment level is not any lower than TTTF, while satisfaction with work and coworkers was also higher. Given that their SRT results also supported that they are providing excellent teaching, especially in medium to large-size classes in lower division courses, they are performing quite successfully in their contribution to the teaching missions of their institution.

Recommendations

Faculty are socialized as members of an institution by explicit promotion/reward structures and implicit social interactions. A research university's promotion/reward system as well as its culture, therefore, needs to acknowledge the different needs and expectations of contingent faculty and TTTF in a more explicit way. For example, contingent faculty may prefer more flexible work environments or different kinds of opportunities that add to their expertise and experiences over the traditional, scholarly productivity model. However, different options and considerations for different types of positions have not been clearly articulated. More noticeably than before, increasing portions of contingent instructors are women and diverse ethnically (Kezar & Sam, 2010b). In the case of the institution where this dissertation is based on, more than half of instructional staff members are women (51.9%) and more than a third of term

faculty members are also women (36.1%). The proportion of non-white groups is slowly yet gradually increasing in the contingent faculty group. These groups' work experiences or demands for balance between work and family life may suggest the need for a different system than one focused on parameters for a group that is dominantly male or white.

Although the tenure system has been central to the development of the status of TTTF and governance in academia, it is increasingly important to establish equivalent promotional systems for contingent faculty in terms of titles and categorization, as well as resources. To help attract and retain competent teaching faculty and staff, adopting reward system that provides equal conditions for all groups may not be possible, given the diverse needs and the volatile funding conditions. However, institutions can signal that they are not indifferent to the changes in their workforce.

For example, the university where this current study was done has made ongoing efforts to develop titles corresponding to the seniority and advancement of instructional staff. For example, "teaching specialist" can be promoted to "senior teaching specialist" and "lecturer" to "senior lecturer." The development of professorial titles for those who are not on tenure track, such as "teaching assistant professor" and "teaching associate professor," has been implemented to accommodate the need to attract and retain competent pools of instructors (Carrier & Wilhelmson, 2013). Given that an allocation of separate resources for radically revamping existing contingent faculty policies and developing career advancement plans may neither happen quickly due to budgetary and political reasons, it is noteworthy that the institution where this study was done made efforts to examine changes in their contingent faculty population and to adopt modifications to titles and employment

categories to address these new demands and changes for parts of their non-tenure teaching population. Such information collection and monitoring processes are symbolic in themselves, signaling institution's dedication to the issue (Feldman & March, 1981).

Another point to consider when supporting contingent faculty is that teaching attracts people to do the job and provides inherent satisfaction in itself and can be better supported. According to Olsen et al. (1995)'s study, intrinsic satisfaction of academic work had a significant direct influence on the job satisfaction of women and minority faculty in research universities. For a teaching oriented contingent faculty, a professional review on teaching, instructor effectiveness training, mentoring program, or support for technical devices can be a benefit for both individuals and the institution. A special reward for certain beneficial behaviors or excellent teaching performance needs to be also officially recognized.

A network or even a list of contingent faculty who teach in the same department may help them feel supported by their department in a way that acknowledges their presence. The critical part of all of these approaches is that they need to be implemented in a way that smartly follows the existing rules and norms of the context because each academic institution has its unique culture and norms (Tierny & Rhoads, 1994). In addition, the rising number of subject matter professionals who come into academe with no teaching experience can benefit from plans to help them make a successful transition into their teaching roles. These plans might include teaching workshops for the first-timers, guided orientation to the institutional culture and general teaching tips (Harber & Lyons, 2007; Schwartz, 2007).

Including contingent faculty in the institutional data systems and tracking changes

is another way to help this group flourish. According to Carrier and Wilhelmson (2013), the university where this study was conducted developed a systematic structure through which the proportion of contingent faculty was restrained by setting a ceiling percentage and requiring special plans be approved, to exceed that ceiling, monitored, and reported. Each college was held accountable for its own flexibility and plan of instructional staff recruitment. Worldwide, an institution that aspires to stay in a competitive position as a research university tends to keep the percentage of academic staff who do only teaching under 10 to 20 percent of all faculty (Kuzminov, 2012).

The inclusion of contingent faculty data into the institutional database, as shown in the survey data used in this study, and annual follow-up for monitoring trends in each college, was a significant step for understanding and supporting this group. Because no systematic management of contingent faculty data is routinely accomplished in major public research universities (Cross & Goldenberg, 2009), the power of data management is lost. Therefore, more rigorous collection and the use of such data are recommended for those institutions that have a growing contingent faculty group. If the institutions wish to have reliable evidence for the contributions of these teaching staff and a system that provides support, such data are essential.

Lastly, student evaluation data also provide much needed information and better understanding about institutional matters when used in combination with other institutional data as seen in this study. SRT was often left unused in any complementary manner to other existing data sets (Theall & Franklin, 2001). Few research-intensive universities have attempted using student-oriented teaching data for following up teaching performance across the types of teaching staff (Cross &

Goldenberg, 2009). Such monitoring of students' evaluation of teaching, however, could suggest some dependable guidance for acknowledging and supporting the teaching behaviors of contingent faculty.

Limitations

The limitations of this study are largely based on the scope of participants and the nature of the survey instrument used. Because the survey was originally administered to all faculty and staff with appointments of at least 50 percent FTE, those who worked less than that were not included. Since many contingent faculty around the country work less than 50 percent, it is not known whether their attitudes and responses would have been similar or different from those who hold appointments of less than that. The scope of the application of this study's result may be thus limited. In addition, the survey was originally distributed to all members of the population like a census, not to a pre-designed sampled group, because the original purpose of this survey was a campus-wide investigation for college, department or unit level reporting However, demographics of respondents were compared to the original population (entire faculty who work over 50 percent FTE) to confirm its representativeness.

Another limitation involves the survey items tapping Perceived Organizational Support (POS). The original POS items that exactly match the original Survey of Perceived Organizational Support (SPOS) (Eisenberger et al., 1986) were not used, and the interpretation of POS may not be completely transferrable to the survey items used in this study. Nevertheless, the alternative items used in this study regarding employees' perception of support from their workplace were internally reliable (.94)

and could be used as a proxy to represent the level of perception of support from organizations.

Lastly, this study was conducted in a public, land-grant research institution located in the Midwest. Although other public research universities may share many similar context factors or features, the history of employment and academic cultures are unique to this one institution. A direct transfer of this study's results and implications may not be warranted to other institutions.

Suggestions for Future Research

For future research, a more in-depth investigation of the teaching strategies of contingent faculty would contribute to understanding how they address some difficulties they face in the classrooms. Although their teaching in medium or large size classes were found to be done in a comparably excellent level, in this study, what they find as barriers for better teaching could inform continued support for this group. Observation of classrooms would be also help understanding any different strategies or approach made in different sizes of classroom settings.

In this study, term faculty and instructional staff were aggregated as one contingent faculty group to attain enough sample size to represent population. However, examining how similar or disparate characteristics they have could help each college address more specific needs for supporting their contingent faculty group. For example, in health science and medical school, the use of term faculty is more prevalent than in other colleges. The use of professorial title, although it is not accompanied with eligibility for tenure, is preferred in some disciplines. Instructional staff is, on the other hand, more commonly used in liberal arts. Such discipline-

oriented trends in the recruitment of contingent faculty need to be clearly identified at the unit level and monitored.

Conclusion

With changing environments and increased pressures for funding, public research universities are undergoing transformations. As one of these changes, contract-based teaching faculty are increasingly taking part in fulfilling the educational mission of these institutions. Such change in the status of professorial positions in modern universities is also a part of a global trend. A growth of faculty group who specialize in teaching, although they are less acknowledged than TTTF, professionally, allows institutions to more flexibly deal with volatile circumstances (Kuzminov, 2012).

As these new groups emerge, there are increased pressures to help this group navigate academia, in a way that mutually benefits each other. According to Tierny and Rhoads (1994), faculty socialization is an “ongoing” and a “bidirectional” (p. 6) cultural process. Given that the nature of faculty characteristics change to meet the demands of institutions, the organizational structure and culture of academic institutions need to adjust to address the needs of this more diverse faculty.

Internationally, contracts and fixed-term appointments are more common employment practices in academia than before, yet there are also some variations in how each country’s academia responds to the trend. Western Europe is relatively less affected by this trend although the number of their non-tenure employment is also growing (Altbach & Pacheco, 2012). In Canada, where employment practices are highly decentralized in each province, both full-time and part-time faculty are mostly unionized although the same level of benefits and pays are often not secured for part-

time or non-tenure-track faculty (Jones & Weinrib, 2012). In Mexico, according to Altbach & Pachero (2012), part-time academic staff are eligible for tenure as well as full-time, and part-time academic staff in Argentina are paid on a comparable level with full-time staff.

The former president of the university where this current study was based suggested that a "hybrid" public research university will be more commonly seen in the twenty-first century as a response to the needs of students than those of the state. Shrinking state support primarily explains this change. Keeping these institutions flourishing will not be an easy task with this major political change, although they will try to remain a vital learning institution by supporting the traditional values such as access, dissemination of knowledge, and promotion of public good (Yudof, 2003). This explains the urgency of understanding and supporting an increasingly significant part of the workforce in academia--contingent faculty. Such faculty will play an even more important role in carrying out institutional missions and communicating institutional values. How institutions support this group, for their successful fulfillment of mission, will be critical for their future.

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Appendix A. Survey Questionnaire (2012)

2012 University of Minnesota PULSE Survey

FAQ

Thank you for agreeing to participate!

Before you get started, we would like to answer a few questions you may have about some of the terms used in the survey.

What do you mean by department/unit?
We realize that many of you may be affiliated with multiple areas within the University and we would like you to select **one** and consider this your "home" unit or department. When responding to questions about your department or unit, please think about the context and the group of people with whom you regularly work in this "home" department or unit.

What do you mean by responsible administrator/department chair?
Some people at the university have multiple responsible administrators/department chairs. In responding to questions about responsible administrator/department chair, we would like you to consider the **one** person who you most frequently report to, who provides you feedback, who oversees your work, etc.

What do you mean by responsible administrator/supervisor?
Some people at the university have multiple responsible administrators/supervisors. In responding to questions about responsible administrator/supervisor, we would like you to consider the **one** person who you most frequently report to, who provides you feedback, who oversees your work, etc.

What time frame should I consider when responding?
Opinions can change from month to month and even day to day. For the current survey, we would like you to be thinking about your experiences over the **past six months** unless another timeframe is indicated.

0% completed

JOB SATISFACTION

Please tell us about your satisfaction with your job. Please consider the past six months as the time frame for your responses. Please choose a response for **each** item by clicking in the appropriate circle. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

Check	Yes	if the item describes your job most of the time
	No	if the item does not describe your job most of the time
	Not sure/Uncertain	if you cannot decide

Do the following items describe your **work** most of the time?
(*Click one circle for each line.*)

Question	Yes	Not sure/Uncertain	No
Gives sense of accomplishment	○ Yes	○ Not sure/Uncertain	○ No
Dull	○ Yes	○ Not sure/Uncertain	○ No
Satisfying	○ Yes	○ Not sure/Uncertain	○ No
Uninteresting	○ Yes	○ Not sure/Uncertain	○ No
Challenging	○ Yes	○ Not sure/Uncertain	○ No

Do the following items describe your **department chair/responsible administrator** most of the time?
(*Click one circle for each line.*)

Do the following items describe your **supervisor/responsible administrator** most of the time?
(*Click one circle for each line.*)

Question	Yes	Not sure/Uncertain	No
Praises good work	Yes	Not sure/Uncertain	No
Annoying	Yes	Not sure/Uncertain	No
Tactful	Yes	Not sure/Uncertain	No
Bad	Yes	Not sure/Uncertain	No
Up-to-date	Yes	Not sure/Uncertain	No

Do the following items describe the majority of **people you work with** most of the time?
(*Click one circle for each line.*)

Question	Yes	Not sure/Uncertain	No
Helpful	Yes	Not sure/Uncertain	No
Boring	Yes	Not sure/Uncertain	No
Intelligent	Yes	Not sure/Uncertain	No
Lazy	Yes	Not sure/Uncertain	No
Responsible	Yes	Not sure/Uncertain	No

Do the following items describe the **future of your job** with this organization?
(*Click one circle for each line.*)

Question	Yes	Not sure/Uncertain	No
Unpredictable	Yes	Not sure/Uncertain	No
Stable	Yes	Not sure/Uncertain	No
Unknown	Yes	Not sure/Uncertain	No
My job is almost guaranteed	Yes	Not sure/Uncertain	No
Uncertain	Yes	Not sure/Uncertain	No
Can depend on being here	Yes	Not sure/Uncertain	No

Do the following items describe your **advancement opportunities** most of the time?
(*Click one circle for each line.*)

Question	Yes	Not sure/Uncertain	No
Good chance for promotion	Yes	Not sure/Uncertain	No
Dead end job	Yes	Not sure/Uncertain	No
Advancement based on ability	Yes	Not sure/Uncertain	No
Good opportunity for advancement	Yes	Not sure/Uncertain	No
Unfair advancement policy	Yes	Not sure/Uncertain	No

Overall, I am satisfied with my employment at the University.
(*Select one*)

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Would you recommend employment here to a friend or colleague?
(*Select one*)

- Yes
- No
- Not sure

If I were doing it again, I would accept a position at the University.
(*Select one*)

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

PAY AND BENEFITS SATISFACTION

For each statement, indicate how satisfied or dissatisfied you feel about various aspects of your pay. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

Question	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
My benefit package	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
My most recent raise	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
My current salary	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
The University's pay structure	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
My overall level of pay	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
The value of my benefits	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Consistency of the University's pay policy	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied

How my raises are determined	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Differences in pay among jobs in the University	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
My salary relative to the salaries of colleagues in my department	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied

JOB STRESS

Please tell us about the stress you feel because of your job. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

Question	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
I feel a great deal of stress because of my job	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
I almost never feel stressed at work	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree

Continue

Send technical questions/comments to J. Scott Murdoch at: j-murd@umn.edu.

2012 University of Minnesota PULSE Survey

FAQ

18% completed

SUPPORT FROM YOUR DEPARTMENT CHAIR OR RESPONSIBLE ADMINISTRATOR

For each of the items, indicate whether you agree or disagree that the characteristics describe your department chair or responsible administrator. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

My department chair or responsible administrator ...

SUPPORT FROM YOUR SUPERVISOR OR RESPONSIBLE ADMINISTRATOR

For each of the items, indicate whether you agree or disagree that the characteristics describe your supervisor or responsible administrator. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

My supervisor or responsible administrator ...

Question	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
takes the time to learn about my career goals and aspirations	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
cares about whether or not I achieve my goals	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
keeps me informed about different career opportunities for me in the University	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
makes sure I get the credit when I accomplish something substantial on the job	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
gives me helpful feedback about my performance	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
gives me helpful advice about improving my performance when I need it	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
supports my attempts to acquire additional training or education to further my career	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
provides assignments that give me the opportunity to develop and strengthen new skills	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
provides me special projects that increase my visibility in the University	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree

is understanding when I have an unexpected family or personal problem	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
is supportive of my efforts to balance work and personal needs	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree

SATISFACTION WITH DEPARTMENT SUPPORT

For each of the items, indicate whether you agree or disagree that the characteristics describe your department. When responding to these questions, please think about the people in your department in general rather than any individual in particular. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

Question	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
Help is available from my department when I have a problem	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
My department really cares about my well being	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
My department is willing to extend itself in order to help me perform my job to the best of my ability	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
My department cares about my general satisfaction at work	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
My department shows very little concern for me	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
My department cares about my opinions	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
My department takes pride in my accomplishments at work	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree

SUPPORT FOR SCHOLARSHIP AND TEACHING

Please evaluate the following factors related to support for scholarship and teaching. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

Please indicate the degree to which you are satisfied with each of the following:

Question	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Classroom Space	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Office space	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Lab or research space	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Availability of nearby parking	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied

Library resources	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Computer resources	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Clerical and administrative staff	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Technical and research staff	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Computing support staff	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Support for securing grants	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Internal funding for new research ideas	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Internal funding for new teaching ideas	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Other resources to support research	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Teaching responsibilities	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Access to teaching assistants	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Advising responsibilities	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Quality of graduate students	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied

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FAQ

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SATISFACTION WITH UNIVERSITY AND DEPARTMENT CHARACTERISTICS

We would like to know how satisfied you are with characteristics of the University and your department.

Overall, how satisfied are you being a faculty member at the University of Minnesota?
(*Select one*)

- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied
- Not applicable

I am currently satisfied with the following aspects of the University and my department:

Question	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Prestige of the University	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Prestige of my unit or department	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Opportunities available for spouse/partner at the University	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Opportunities available for spouse/partner in the community	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree

Please indicate what percent of your work time you spend on teaching, research, service, and administrative duties during a typical semester at your academic job. Please ensure that your indicated percentages total 100%.

Teaching (including teaching, grading, course preparation, advising, and supervising students)	%
Research/Scholarship (including research, reviewing or preparing articles or books, preparing for professional meetings and conferences, seeking outside funding)	%
Service (including service to professional societies or associations as well as service to your academic institution)	%
Administration (formal administrative appointment)	%

Please indicate what percent of your work time **you would prefer** to spend on teaching, research, service, and administrative duties during a typical semester at your academic job. Please ensure that your indicated percentages total 100%.

Teaching (including teaching, grading, course preparation, advising, and supervising students)	%
Research/Scholarship (including research, reviewing or preparing articles or books, preparing for professional meetings and conferences, seeking outside funding)	%
Service (including service to professional societies or associations as well as service to your academic institution)	%
Administration (formal administrative appointment)	%

To what extent do you agree with the following statements about your job and the mission of the University of Minnesota? Please indicate your agreement or disagreement with respect to your current environment and not how it might ideally be.

Question	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
I know what is expected of me at work.	○	○	○	○	○	○	○
I know how my job contributes to the mission of the University.	○	○	○	○	○	○	○
It is important to me to feel successful in my work/career.	○	○	○	○	○	○	○
It is important to me that I have a job/career in which I can achieve something of importance.	○	○	○	○	○	○	○

To what extent do you agree with the following statements about your job and the mission of the University of Minnesota? Please indicate your agreement or disagreement with respect to your current environment and not how it might ideally be.

Question	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
I have confidence in the direction the **University** is heading.	○	○	○	○	○	○	○
I have confidence in the direction my **coordinate campus** is heading.	○	○	○	○	○	○	○
I have confidence in the direction my **college/administrative unit** is heading.	○	○	○	○	○	○	○
I have confidence in the direction my **department/division unit** is heading.	○	○	○	○	○	○	○
I am satisfied with **University** leadership.	○	○	○	○	○	○	○
I am satisfied with my **coordinate campus** leadership.	○	○	○	○	○	○	○
I am satisfied with my **college/administrative unit** leadership.	○	○	○	○	○	○	○

I am satisfied with my **department/division** leadership.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
The University values diversity.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
University leadership is committed to promoting diversity.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree

In my current work setting, I am ...

Question	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to be innovative	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to perform high quality work	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to demonstrate respect toward individuals in the University community	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to provide high quality service	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to be collaborative and have a team orientation	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to adapt and change	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to promote a sense of a common University community	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to be results oriented	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to operate with integrity and comply with ethical practices	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to promote diversity of ideas, experiences, and people	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
supported in efforts to promote work for the good of society	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
recognized for achievement	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
rewarded for achievement	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree

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FAQ

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Please indicate with which of the following area you identify with the most:
(*Select one*)

- ○ The University of Minnesota
- ○ My campus
- ○ My college
- ○ My department or unit
- ○ My discipline
- ○ My occupation
- ○ Other (please specify)

What is (are) the reason(s) you work at the University of Minnesota?
(*Check all that apply*)

- ☐ Believe in the University's mission
- ☐ Feel loyalty to the U
- ☐ Enjoy my work tasks
- ☐ Enjoy the work environment at the U
- ☐ Enjoy working with my coworkers/colleagues
- ☐ Enjoy working for my responsible administrator/department chair
- ☐ Enjoy living in this community
- ☐ Good pay
- ☐ Good benefits
- ☐ Job security
- ☐ Lack of job alternatives
- ☐ Tuition benefits
- ☐ Other (please specify)

YOUR WORKGROUP

For each of the items, indicate the extent to which these characteristics describe your workgroup. We realize that many of you may be affiliated with multiple areas within the University and we would like you to select **one** and consider this your "home" department

or workgroup. When responding to questions about your workgroup, please think about the context and the group of people with whom you regularly work in this "home" department or workgroup. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

Question	Not at all	A little	Some	A lot	Very much
How much do members of your workgroup take a personal interest in one another?	○ Not at all	○ A little	○ Some	○ A lot	○ Very much
Are the members of your workgroup good friends with one another?	○ Not at all	○ A little	○ Some	○ A lot	○ Very much

UNIVERSITY COMPLIANCE

Question	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
I know where to report violations of law or policy (such as the University's confidential reporting line.)	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
I believe I would be protected from retaliation if I report a suspected violation.	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree

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FAQ

56% completed

TENURE

What is your tenure status?
(*Select one*)

- Tenured within the last five years
- Tenured more than five years ago
- On tenure track but not tenured
- Not on tenure track

Continue

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FAQ

57% completed

If tenured within the last five years,
Did you receive your initial tenure from the University of Minnesota?
(*Select one*)

- Yes
- No

If you received your initial tenure from the University of Minnesota. Below we ask you questions on your perceptions of the tenure process. Please answer candidly; **remember that all of your individual responses will be kept completely confidential and will be accessible only to the researchers.**

Question	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
I was allowed a great deal of participation in the tenure process.	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
The tenure procedures were adequately explained to me.	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
I had a great deal of input into the tenure process.	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
I was able to significantly influence my tenure decision.	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
A reasonable rationale was provided for the tenure procedures.	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
I had a great deal of control over my tenure decision.	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
The tenure decision was commensurate with my performance.	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
The tenure decision reflected the outcome I deserved.	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree

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FAQ

64% completed

CLOCK-STOPPAGE ELIGIBILITY AND USAGE

At any time since you started working at the University of Minnesota, have you had your tenure clock slowed or stopped for personal reasons, including care giving for a child or parent, your own health concerns, or a family crisis?
(*Select one*)

- Yes, within the past year
- Yes, more than a year ago but within the past five years
- Yes, more than five years ago
- No, I was not eligible
- No, but I was eligible

If you selected any of the YES choices above, how supportive was your department/unit concerning your having your tenure clock stopped or slowed?
(*Select one*)

- Very unsupportive
- Somewhat unsupportive
- Neither unsupportive nor unsupportive
- Somewhat supportive
- Very supportive
- Not applicable

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FAQ

65% completed

Please use the scale below to indicate the extent to which you agree with each of the following statements. These statements refer to how members of your department as a whole (not you as an individual) react when a non-tenured professor (who is in a tenure-track position) decides to stop his or her tenure clock due to a childbirth, adoption, family member illness, personal illness, or other reason listed in the tenure code.

In my department,

Question	Strongly disagree	Disagree to some extent	Uncertain	Agree to some extent	Strongly agree
non-tenured professors are penalized for stopping the clock.	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
stopping the clock is a signal that a non-tenured professor lacks commitment to his or her job.	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree
people react negatively when a non-tenured professor stops the clock.	○ Strongly disagree	○ Disagree to some extent	○ Uncertain	○ Agree to some extent	○ Strongly agree

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FAQ

66% completed

JOB INTENTIONS

The following questions ask you about your intentions of leaving your current job. Please consider the past six months as the time frame for your responses. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

How often do you think about **quitting** your job?
(*Select one*)

- Never
- Seldom
- Sometimes
- Often
- Constantly

How likely is it that you will *quit* your job in the **next several months**?
(*Select one*)

- Very **un**likely
- **Un**likely
- Neither likely nor unlikely
- Likely
- Very likely

How easy or difficult would it be *financially* for you to **quit** your job?
(*Select one*)

- Very difficult
- Difficult
- Neither easy nor difficult
- Easy
- Very easy

How likely is it that you will explore job opportunities outside the University, for example by checking job listings, talking to colleagues and updating your resume **in the next several months**?
(*Select one*)

- Very **un**likely
- **Un**likely
- Neither likely nor unlikely
- Likely
- Very likely

CONSIDERATIONS IN LEAVING THE UNIVERSITY OF MINNESOTA

Next, we would like to ask some questions regarding any current or former intentions to leave the University of Minnesota.

Have you ever seriously considered leaving the University of Minnesota?
(*Select one*)

- No, not seriously
- Yes, somewhat seriously
- Yes, very seriously

If yes, what factors made or would make such a move attractive to you? Indicate how important each of the following factors would be as current motivations for leaving the University of Minnesota.

Desire to:

Question	Not at all important	Only slightly important	Moderately important	Very important
Obtain a position of higher rank, responsibility, or visibility	Not at all important	Only slightly important	Moderately important	Very important
Join a more prestigious unit or institution	Not at all important	Only slightly important	Moderately important	Very important
Earn a higher salary	Not at all important	Only slightly important	Moderately important	Very important
Join a unit where I would be more appreciated	Not at all important	Only slightly important	Moderately important	Very important
Move to a more teaching-oriented institution	Not at all important	Only slightly important	Moderately important	Very important
Move to a more research-oriented institution	Not at all important	Only slightly important	Moderately important	Very important
Reduce my teaching responsibilities	Not at all important	Only slightly important	Moderately important	Very important
Work in a less-pressured environment	Not at all important	Only slightly important	Moderately important	Very important
Achieve a better balance between my work and personal life	Not at all important	Only slightly important	Moderately important	Very important
Live in a different part of the country or world	Not at all important	Only slightly important	Moderately important	Very important
Live in a more cosmopolitan or urban setting	Not at all important	Only slightly important	Moderately important	Very important
Live closer to family and friends	Not at all important	Only slightly important	Moderately important	Very important
Enhance my spouse or partner's career opportunities	Not at all important	Only slightly important	Moderately important	Very important

- Very **un**likely
- **Un**likely
- Neither likely nor unlikely
- Likely
- Very likely

CONSIDERATIONS IN LEAVING THE UNIVERSITY OF MINNESOTA

Next, we would like to ask some questions regarding any current or former intentions to leave the University of Minnesota.

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- Yes, somewhat seriously
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Join a more prestigious unit or institution	Not at all important	Only slightly important	Moderately important	Very important
Earn a higher salary	Not at all important	Only slightly important	Moderately important	Very important
Join a unit where I would be more appreciated	Not at all important	Only slightly important	Moderately important	Very important
Move to a more teaching-oriented institution	Not at all important	Only slightly important	Moderately important	Very important
Move to a more research-oriented institution	Not at all important	Only slightly important	Moderately important	Very important
Reduce my teaching responsibilities	Not at all important	Only slightly important	Moderately important	Very important
Work in a less-pressured environment	Not at all important	Only slightly important	Moderately important	Very important
Achieve a better balance between my work and personal life	Not at all important	Only slightly important	Moderately important	Very important
Live in a different part of the country or world	Not at all important	Only slightly important	Moderately important	Very important
Live in a more cosmopolitan or urban setting	Not at all important	Only slightly important	Moderately important	Very important
Live closer to family and friends	Not at all important	Only slightly important	Moderately important	Very important
Enhance my spouse or partner's career opportunities	Not at all important	Only slightly important	Moderately important	Very important

Pursue a career outside academia	Not at all important	Only slightly important	Moderately important	Very important
Other (please specify)	Not at all important	Only slightly important	Moderately important	Very important

NEGATIVE EXPERIENCES AT WORK

The following question asks about certain unfavorable experiences you may have had at the University. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

Over the past year, have you experienced behavior that is offensive, intimidating, or hostile during your work at the University?

- Never
- Rarely
- Sometimes
- Often
- Very often

LIFE OUTSIDE OF WORK

The next set of questions relate to you and your life outside of work including your home and family life (family defined as you think of it). Please answer the following questions as honestly as possible.

For each of the items, indicate whether you agree or disagree with the statements about your life outside of work. Please answer candidly; **remember that all of your responses will be kept completely confidential.**

Question	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
The demands of my work interfere with my home and family life.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
The amount of time my job takes up makes it difficult to fulfill family responsibilities.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
Things I want to do at home do not get done because of the demands my job puts on me.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
My job produces strain that makes it difficult to fulfill family duties.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
Due to work-related duties, I have to make changes to my plans for family activities.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
The demands of my family or spouse/partner interfere with work-related activities.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
Family-related strain interferes with my ability to perform job-related duties.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree

Current marital status
(*Select one*)

- Single
- Married
- Same-sex domestic partner
- Living with a significant other or partner
- Divorced or separated
- Widowed
- Choose not to answer

If you are married, have a same-sex domestic partner, or are living with a partner, is your spouse or partner employed?
(*Select one*)

- Yes
- No
- Choose not to answer

If you are married, have a same-sex domestic partner, or are living with a partner, approximately how many hours does your spouse or partner work in paid employment during a typical week?

If you are married, have a same-sex domestic partner, or are living with a partner, does your spouse or partner receive heath care benefits from their employer?
(*Select one*)

- Yes
- No
- Don't know
- Choose not to answer

If you are married, have a same-sex domestic partner, or are living with a partner, is your spouse or partner employed at the University of Minnesota?
(*Select one*)

- No
- Yes, in an academic role
- Yes, in a non-academic role
- Choose not to answer

Please indicate how many children or family members for whom you have significant responsibility:

Number of children or family members under age 6

Number of children or family members between ages 6 and 18

Number of family members over age 18

Please indicate how many hours you **spend** on occupational, marital, parental, community, friendship, household, and personal activities and sleep during a *typical weekday day*. Please ensure that your hours total 24 hours.

Occupational (working for pay, professional development activities, commuting)	actual hours spent
Family/Parental (time along with spouse/partner talking or sharing an activity; caring for children, playing with children)	actual hours spent
Community/Friendship (volunteering, attending religious services; socializing, talking on the phone, texting)	actual hours spent
Household (e.g. housework, lawn care, grocery shopping, meal preparation)	actual hours spent
Personal (e.g. personal care activities, exercise, leisure, hobbies)	actual hours spent
Sleep	actual hours spent

Please indicate how many hours **you would prefer** to spend on occupational, marital, parental, community, friendship, household, and personal activities and sleep during a *typical weekday day*. Please ensure that your hours total 24 hours.

Occupational (working for pay, professional development activities, commuting)	preferred hours to spend
Family/Parental (time along with spouse/partner talking or sharing an activity; caring for children, playing with children)	preferred hours to spend
Community/Friendship (volunteering, attending religious services; socializing, talking on the phone, texting)	preferred hours to spend
Household (e.g. housework, lawn care, grocery shopping, meal preparation)	preferred hours to spend
Personal (e.g. personal care activities, exercise, leisure, hobbies)	preferred hours to spend
Sleep	preferred hours to spend

Please indicate how many hours you **spend** on occupational, marital, parental, community, friendship, household, and personal activities and sleep during a *typical weekend day*. Please ensure that your hours total 24 hours.

Occupational (working for pay, professional development activities, commuting)	actual hours spent
Family/Parental (time along with spouse/partner talking or sharing an activity; caring for children, playing with children)	actual hours spent
Community/Friendship (volunteering, attending religious services; socializing, talking on the phone, texting)	actual hours spent
Household (e.g. housework, lawn care, grocery shopping, meal preparation)	actual hours spent
Personal (e.g. personal care activities, exercise, leisure, hobbies)	actual hours spent
Sleep	actual hours spent

Please indicate how many hours **you would prefer** to spend on occupational, marital, parental, community, friendship, household, and personal activities and sleep during a *typical weekend day*. Please ensure that your hours total 24 hours.

Occupational (working for pay, professional development activities, commuting)	preferred hours to spend

Family/Parental (time along with spouse/partner talking or sharing an activity; caring for children, playing with children)	preferred hours to spend
Community/Friendship (volunteering, attending religious services; socializing, talking on the phone, texting)	preferred hours to spend
Household (e.g. housework, lawn care, grocery shopping, meal preparation)	preferred hours to spend
Personal (e.g. personal care activities, exercise, leisure, hobbies)	preferred hours to spend
Sleep	preferred hours to spend

Please think of the ways in which you may have done things differently in order to address family and household concerns. Please use the response "Does not apply" for those items that are not applicable to you (e.g., items mentioning children if you do not have children).

Question	Never	Rarely	Sometimes	Often	Very often	Does not apply
Arranging your work schedule to attend to household and family responsibilities	○ Never	○ Rarely	○ Sometimes	○ Often	○ Very often	○ Does not apply
Completing work outside of your regular working hours to make up for work missed (e.g., coming in early to leave early or working weekends in anticipation of household or family responsibilities)	○ Never	○ Rarely	○ Sometimes	○ Often	○ Very often	○ Does not apply
Delegating tasks to other family members (e.g. spouse, children)	○ Never	○ Rarely	○ Sometimes	○ Often	○ Very often	○ Does not apply
Cutting down on the amount of "outside activities" (e.g., hobbies, volunteering, leisure) in which you can be involved	○ Never	○ Rarely	○ Sometimes	○ Often	○ Very often	○ Does not apply
Reducing the time you spend at work	○ Never	○ Rarely	○ Sometimes	○ Often	○ Very often	○ Does not apply
Limiting my involvement on the job; saying "no" to some of the things you could be doing	○ Never	○ Rarely	○ Sometimes	○ Often	○ Very often	○ Does not apply
Planning ahead so that major changes at home will not disturb your career goals	○ Never	○ Rarely	○ Sometimes	○ Often	○ Very often	○ Does not apply
Making better use of time at work	○ Never	○ Rarely	○ Sometimes	○ Often	○ Very often	○ Does not apply
Postponing certain tasks until the pressure to do them subsides	○ Never	○ Rarely	○ Sometimes	○ Often	○ Very often	○ Does not apply

---

We are interested in volunteer activities, that is, activities for which people are not paid, except perhaps expenses. We only want you to consider volunteer activities that you did through or for an organization (e.g. religious, youth, and social or community service organizations), even if you only did them once in a while. Sometimes people don't think of activities they do infrequently or activities they do for children's schools or youth organizations as volunteer activities. Please include these activities.

During the last 12 months, have you done any volunteer activities through or for an organization?
(*Select one*)

- No
- Yes

If yes, please estimate your total number of hours.

During the past 12 months, did you donate money, assets, or property to charitable or religious organizations?
(*Select one*)

- No
- Yes

If yes, please estimate your total charitable contributions not including donations during the Community Fund Drive.

WORK ARRANGEMENTS AT THE UNIVERSITY

The University of Minnesota offers flexible work arrangements for some employees in some jobs. Do you participate in any flexible work arrangements?
(*Select one*)

- No
- Yes

If you participate in any flexible work arrangements, check all that apply

- **Flextime** (e.g., flexibility in arrival, departure and/or lunch times, typically with a designated core time during the day which all staff are present)
- **Compressed work week** (e.g., work a 40-hour work week in less than the traditional 8-hour day, 5-day work week. For example, an employee works four 10-hour days)
- **Job sharing** (e.g., two people work part-time and share the responsibilities of one full-time job)
- **Telecommuting** (e.g., an employee carries out all or some of the duties of the job at home or another alternate work location)
- **Flextime** (e.g., flexibility in arrival, departure and/or lunch times, typically with a designated core time during the day which all staff are present)
- **Compressed work week** (e.g., work a 40-hour work week in less than the traditional 8-hour day, 5-day work week. For example, an employee works four 10-hour days)
- **Job sharing** (e.g., two people work part-time and share the responsibilities of one full-time job)
- **Telecommuting** (e.g., an employee carries out all or some of the duties of the job at home or another alternate work location)
- **Reduced-time/part-time** (e.g., working fewer than 40 hours per week with salary prorated for the actual number of hours worked)

If you participate in any flexible work arrangements, how satisfied are you with your work arrangement?

- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

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FAQ

88% completed

QUESTIONS ABOUT YOU

The following questions ask you about your health and life in general, not just at work. As you may know, the University has been involved in several Wellness Initiatives and is interested in how job experiences can influence overall well-being. Please answer candidly; **all of your responses will be kept completely confidential.**

How often are you bothered by minor health problems such as headaches, insomnia, or stomach upset?
(*Select one*)

- Never
- Rarely
- Sometimes
- Often
- Very often

During the past six months, how often have you felt nervous and stressed?
(*Select one*)

- Never
- Rarely
- Sometimes
- Often
- Very often

In general, my health is:
(*Select one*)

- Excellent
- Very good
- Good
- Fair
- Poor

In general, I am satisfied with my life.
(*Select one*)

- Strongly agree
- Somewhat agree
- Neutral
- Somewhat disagree
- Strongly disagree

BACKGROUND INFORMATION

We would like to ask you to provide some background information about yourself. Please remember that your responses are confidential. You may choose not to answer any question that you do not want to answer.

Gender

- Female
- Male
- Transgender
- Other
- Choose not to answer

Age (in years)

- Choose not to answer

Are you Hispanic or Latino?
(*Select one*)

- Yes
- No
- Choose not to answer

Please select one or more that apply:

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Choose not to answer

Sexual Orientation/Gender Identity
(*Select one*)

- Bisexual
- Gay
- Heterosexual
- Lesbian

- Choose not to answer

Are you disabled?
(*Select one*)

- Yes
- No
- Choose not to answer

What is the *highest level of education* you have currently completed?
(*Select one*)

- Less than a high school diploma
- High school diploma or GED
- High school plus technical training or apprenticeship
- Some college
- College graduate
- Some graduate school
- Graduate or professional degree (MBA, M.A., M.D., PhD., law degree, etc.)
- Choose not to answer

Have you previously worked as a faculty member at another/other institution(s)?

- No
- Yes

If Yes, how many years did you work as a faculty member at your previous institution(s)?

year(s)

Student Status
(*Select one*)

- Full-time student
- Part-time student
- Not currently a student
- Choose not to answer

How long have you worked at the University of Minnesota?

year(s)

How long have you worked in your current position?

year(s)

How many hours do you work during a typical week?

hour(s)

Of these hours, how many hours do you spend working off campus?

hour(s)

Of these hours, how many hours do you spend working outside of standard work hours (i.e., Monday-Friday, 8am – 5 pm)?

hour(s)

At present, do you have an administrative appointment?

- Yes
- No
- Choose not to answer

If Yes, what is the percent of time allocated to the administrative appointment?

percent of time

In your present position, do you supervise or manage other employees?

- Yes
- No
- Choose not to answer

Please use the space below to provide any thoughts about what your Department, College, or the University could do to improve your quality of life.

Please use the space below to provide any additional thoughts or comments about this survey, your department, or the University.

Continue

Send technical questions/comments to J. Scott Murdoch at: j-murd@umn.edu.

Appendix B. Variables Re-coding

Variables			Wordings in Questionnaire	Coding
Independent variables	Age			20s: 1 30s: 2 40s: 3 50s: 4 60s: 5 70s or over: 6
	Women	Gender	female, male, transgender, other, choose not to answer	Women: 1 Men: 0
	Minority	Ethnicity	American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or other Pacific Islander, White, choose not to answer	Minority (Non-white groups): 1 White: 0
	Graduate Degree	The highest level of education	Less than a high school diploma, High school diploma or GED, High school plus technical training or apprenticeship, some college, college graduate, some graduate school, graduate or professional degree (MBA, M.A., M.D., Ph.D., J.D., etc.), choose not to answer	Graduate degree (graduate or professional degree): 1 The rest: 0
	Coupled	Marital status	Single, Married, Same-sex domestic partner, Living with a significant other or partner, Divorced or separated, Widowed, Choose not to answer	Coupled (Married, Same-sex domestic partner, Living with a significant other or partner): 1 The rest: 0
	Partner employment status		Those who were Married, Same-sex domestic partner, or Living with a significant other or partner and answered "Yes" to the question "If you are married, have a same-sex domestic partner, or are living with a partner, is your spouse or partner employed?"	Coupled & partner unemployed: 1 Coupled & partner employed: 0
	Years in the institution		How long have you worked at the University?	Less than 5 years: 1 5-10 years: 2 10-20 years: 3 20-30 years: 4 30-40 year: 5 Over 40 years: 6
	Reasons for working at the University: Belief in university mission		Those who chose "Belief in the University's mission" and (or) "Feel loyalty to the University" to the question "What is (are) the reason(s) you work at the University?"	"Belief in the University's mission" and (or) "Feel loyalty to the University": 1 The rest: 0
	Reasons for working at the University: Work		Those who chose "Enjoy my work tasks" and (or) "Enjoy the work environment at the University" to the question "What is (are) the reason(s) you work at the University?"	"Enjoy my work tasks": 1 The rest: 0

(continued to the next page)

Variables	Wordings in Questionnaire		Coding	Variables
Independent variables	Reasons for working at the University: Environment		Those who chose "Enjoy the work environment at the University," "Enjoy working with my coworkers/colleagues," "Enjoy working for my responsible administrator/department chair," and (or) "Enjoy living in this community" to the question "What is (are) the reason(s) you work at the University?"	"Enjoy the work environment at the University," "Enjoy working with my coworkers/colleagues," "Enjoy working for my responsible administrator/department chair," and (or) "Enjoy living in this community": 1 The rest: 0
	Reasons for working at the University: Pay/Benefits		Those who chose "Good pay," "Good benefits," and (or) "Job security" to the question "What is (are) the reason(s) you work at the University?"	"Good pay," "Good benefits," and (or) "Job security": 1 The rest: 0
	Reasons for working at the University: Lack of Alternatives		Those who chose "Lack of job alternatives" to the question "What is (are) the reason(s) you work at the University?"	"Lack of job alternatives"": 1 The rest: 0
	Organiza -tional Support	Support from department chair or responsible administrator	My department chair or responsible administrator… a. takes the time to learn about my career goals and aspirations b. cares about whether or not I achieve my goals c. keeps me informed about different career opportunities for me in the University d. makes sure I get the credit when I accomplish something substantial on the job e. gives me helpful feedback about my performance f. gives me helpful advice about improving my performance when I need it g. supports my attempts to acquire additional training or education to further my career h. provides assignments that give me the opportunity to develop and strengthen new skills i. provides me special projects that increase my visibility in the University j. is understanding when I have an unexpected family or personal problem k. is supportive of my efforts to balance work and personal needs	Average of item a through k (Strongly disagree=1 Disagree=2 Uncertain=3 Agree=4 Strongly agree=5)

(continued to the next page)

Variables	Wordings in Questionnaire		Coding	Variables
Independent variables	Organizational Support	Support in work setting	In my current work setting, I am… a. supported in efforts to be innovative b. supported in efforts to perform high quality c. supported in efforts to demonstrate respect toward individuals in the University community d. supported in efforts to provide high quality service e. supported in efforts to be collaborative and have a team orientation f. supported in efforts to be adapt and change g. supported in efforts to promote a sense of a common University community h. supported in efforts to be results oriented i. supported in efforts to operate with integrity and comply with ethical practices j. supported in efforts to promote diversity of ideas, experiences, and people k. supported in efforts to promote work for the good of society l. recognized for achievement m. rewarded for achievement	Average of item a through m (Strongly disagree=1 Disagree=2 Uncertain=3 Agree=4 Strongly agree=5)
	Job Satisfaction	Satisfaction with work	a. Gives me sense of accomplishment b. Dull (R) c. Satisfying d. Uninteresting (R) e. Challenging	Average of item a through e (Yes=3, Not sure=1, No=0)
		Satisfaction with Supervisor	a. Praises good work b. Annoying (R) c. Tactful d. Bad (R) e. Up-to-date	Average of item a through e (Yes=3, Not sure=1, No=0)

(continue to the next page)

Variables	Wordings in Questionnaire		Coding	Variables
Independent variables	Job Satisfaction	Satisfaction with Coworkers	a. Helpful b. Boring (R) c. Intelligent d. Lazy (R) e. Responsible	Average of item a through e (Yes=3, Not sure=1, No=0)
		Satisfaction with pay and benefits	a. My benefit package b. My most recent raise c. My current salary d. The University's pay structure e. My overall level of pay f. The value of my benefits g. Consistency of the University's pay policy h. How my raises are determined i. Difference in pay among jobs in the University j. My salary relative to the salaries of colleagues in my department	Average of item a through j (Very dissatisfied=1 Dissatisfied=2 Neither satisfied nor dissatisfied=3 Satisfied=4 Very satisfied=5)
Dependent variables	(Affective) Organizational commitment		If I were doing it again, I would accept a position at the University.	Strongly disagree=1 Disagree=2 Neither agree nor disagree=3 Agree=4 Strongly agree=5
	Overall Satisfaction		Overall, I am satisfied with my employment at the University.	Strongly disagree=1 Disagree=2 Neither agree nor disagree=3 Agree=4 Strongly agree=5

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Appendix C. Invitation Letter and Reminders

INITIAL EMAIL INVITATION TO TAKE THE SURVEY – SENT MONDAY, APRIL 23, 2012

To: University of Minnesota Faculty and Staff

From: Vice President Kathryn Brown

Subject: 2012 Pulse Survey

I am writing today to ask for your help in building an even better University of Minnesota. The Pulse Survey is an online employee satisfaction survey developed and administered exclusively at the University of Minnesota. The 2012 Pulse Survey is the fifth administration of the biennial survey designed to better understand the work experiences of all employees. The survey should take approximately 20 minutes of your time to complete.

The Pulse Survey measures faculty and staff satisfaction and engagement with key aspects of University employment. It provides important data to leadership at the enterprise and local levels to drive decision-making. Reporting from the 2010 survey helped inform decisions ranging from needs for supervisory training and better recognizing employee contributions to ways to support employees balancing work and family demands.

Your survey responses are completely confidential, and your participation is voluntary. You may use work time to complete the on-line survey. No one other than the researchers affiliated with the Carlson School of Management's Human Resources Research Institute (HRRI) and the University's Office of Institutional Research (OIR) have access to an individual's data. No individual comments or identifiable information is reported. The survey is administered on a secure website housed by OIR and monitored by HRRI.

Your survey responses are completely confidential, and your participation is voluntary. You may use work time to complete the on-line survey. No one other than the researchers affiliated with the Carlson School of Management's Human Resources Research Institute (HRRI) and the University's Office of Institutional Research (OIR) have access to an individual's data. No individual comments or identifiable information is reported. The survey is administered on a secure website housed by OIR and monitored by HRRI.

Here is what you need to do:

- Complete the on-line Pulse Survey by Friday, May 11, 2012.
- If you have any questions, please visit the Frequently Asked Questions (FAQs).
- Access your survey at http://www.irr.umn.edu/hr/pulse12/XXXX.
- If the survey number does not automatically appear in the box, please use survey number XXXX.
- **Please do NOT forward this link to other employees**; if someone you know deleted their email invitation or did not receive one, please have them email j-murd@umn.edu.
- Please try to complete the survey in one session. If you must exit the survey and return later, you must re-enter the survey using the same link provided in this email. Any responses that have been entered prior to a "continue" button will have been saved.

Your input is critical and encourage you to complete the Pulse survey at your earliest convenience.

FIRST EMAIL REMINDER TO TAKE THE SURVEY – SENT NIGHT OF MONDAY, APRIL 30, 2012

To: University of Minnesota Faculty and Staff

From: Kathryn F. Brown, Vice President, Human Resources

Subject: Your Input Matters – Take the 2012 Pulse Survey

Please take 20 minutes out of your work day to complete the 2012 Pulse Survey. There are less than two weeks to provide your views through this important confidential survey.

Your survey responses are confidential, and your participation is voluntary, but your input is critical. No one other than the researchers affiliated with the Carlson School of Management's Human Resources Research Institute (HRRI) and the University's Office of Institutional Research (OIR) have access to an individual's data. No individual comments or identifiable information is reported. The survey is administered on a secure website housed by OIR and monitored by HRRI.

We have developed Frequently Asked Questions (FAQs) to provide answers to common questions about the survey. Here's what you need to do:

- Complete the on-line Pulse Survey by Friday, May 11, 2012.
- Access your survey at http://www.irr.umn.edu/hr/pulse12/XXXX.
- If the survey number does not automatically appear in the box, please use survey number XXXX.
- **Please do NOT forward this link to other employees;** if someone you know deleted their email invitation or did not receive one, please have them email j-murd@umn.edu.
- Please try to complete the survey in one session. If you must exit the survey and return later, you must re-enter the survey using the same link provided in this email. Any responses that have been entered prior to a "continue" button will have been saved.

Your input is critical and we encourage you to complete the Pulse survey at your earliest convenience.

SECOND EMAIL REMINDER TO TAKE THE SURVEY – SENT NIGHT OF MONDAY, MAY 7, 2012

To: University of Minnesota Faculty and Staff

From: Kathryn F. Brown, Vice President, Human Resources

Subject: Please Take the 2012 Pulse Survey

We are in the final week of the University of Minnesota 2012 Pulse Survey. Please take 20 minutes out of your work day to complete this important confidential survey.

Your survey responses are confidential, and your participation is voluntary, but your input is critical. No one other than the researchers affiliated with the Carlson School of Management's Human Resources Research Institute (HRRI) and the University's Office of Institutional Research (OIR) have access to an individual's data. No individual comments or identifiable information is reported. The survey is administered on a secure website housed by OIR and monitored by HRRI.

We have developed Frequently Asked Questions (FAQs) to provide answers to common questions about the survey. Here's what you need to do:

- Complete the on-line Pulse Survey by Friday, May 11, 2012.
- Access your survey at http://www.irr.umn.edu/hr/pulse12/XXXX.
- If the survey number does not automatically appear in the box, please use survey number XXXX.
- **Please do NOT forward this link to other employees**; if someone you know deleted their email invitation or did not receive one, please have them email j-murd@umn.edu.
- Please try to complete the survey in one session. If you must exit the survey and return later, you must re-enter the survey using the same link provided in this email. Any responses that have been entered prior to a "continue" button will have been saved.

Your input is critical and we encourage you to complete the Pulse survey at your earliest convenience.

THIRD EMAIL REMINDER TO TAKE THE SURVEY – SENT NIGHT OF MONDAY, MAY 14, 2012

To: University of Minnesota Faculty and Staff

From: Kathryn F. Brown, Vice President, Human Resources

Subject: 2012 Pulse Survey extended until May 18

We have decided to extend the survey timeline in an effort to increase participation and gather more results. Please take 20 minutes out of your work day to complete this important confidential survey. If you have any questions about the survey, please refer to the Frequently Asked Questions (FAQs).

To make your voice count, here's what your need to do:

- Complete the on-line Pulse Survey by Friday, May 11, 2012.
- Access your survey at http://www.irr.umn.edu/hr/pulse12/XXXX.
- If the survey number does not automatically appear in the box, please use survey number XXXX.
- **Please do NOT forward this link to other employees**; if someone you know deleted their email invitation or did not receive one, please have them email j-murd@umn.edu.
- Please try to complete the survey in one session. If you must exit the survey and return later, you must re-enter the survey using the same link provided in this email. Any responses that have been entered prior to a "continue" button will have been saved.

Remember, the survey is confidential and voluntary. Your input is critical and we encourage you to complete the Pulse survey at your earliest convenience.

FOURTH EMAIL REMINDER TO TAKE THE SURVEY – SENT NIGHT OF WEDNESDAY, MAY 16, 2012

To: University of Minnesota Faculty and Staff

From: Kathryn F. Brown, Vice President, Human Resources

Subject:Two days left to take the 2012 Pulse Survey

The extended deadline to complete the 2012 Pulse Survey is Friday, May 18. If you have not yet taken the survey, I encourage you to take 20 minutes out of your day **TODAY** to take the survey. Every employee at the University has a unique perspective and valuable input. Please make sure that your voice is included.

To make your voice count, here's what your need to do:

- Complete the on-line Pulse Survey by Friday, May 18, 2012.
- Access your survey at http://www.irr.umn.edu/hr/pulse12/XXXX.
- If the survey number does not automatically appear in the box, please use survey number XXXX.
- **Please do NOT forward this link to other employees**; if someone you know deleted their email invitation or did not receive one, please have them email j-murd@umn.edu.
- Please try to complete the survey in one session. If you must exit the survey and return later, you must re-enter the survey using the same link provided in this email. Any responses that have been entered prior to a "continue" button will have been saved.

If you have any questions about the survey, please refer to the Frequently Asked Questions (FAQs). Remember, the survey is confidential and voluntary. Your input is critical and I encourage you to complete the Pulse survey today.

Appendix D. IRB Approval

UNIVERSITY OF MINNESOTA
Change In Protocol Request

Route this form to: See instructions below.	Rev: Jan 2010

Instructions:
Use this form when submitting change requests on IRB protocols. This form is for use when the changes are initiated by the PI. Do not use this form to respond when changes are requested by the IRB. Please do not use this form when responding to changes requested in a stipulation letter.

1. Submit this form to the Human Research Protection Program:

U.S. Mail Address:
Human Research Protection Program
MMC 820
420 Delaware St. SE
Minneapolis, MN 55455-0392

Campus Mail:
Human Research Protection Program
MMC 820
Minneapolis Campus

Deliver to:
D-528 Mayo Memorial Building
Minneapolis Campus
8-4:30, M-F

IRB Protocol Information

IRB Study Number:	**0512S77846**
Current Principal Investigator:	**Theresa M. Glomb, Leonard Goldfine**
Primary Title:	University of Minnesota Pulse Survey: An Analysis of Employee Attitudes and Work Behavior
Submission Date	03/19/10

Indicate the type of change/addition and attach all applicable documents:
☐ Protocol Amendment: Version , Dated
☐ Revised Investigator Brochure: Version , Dated
☒ Recruitment Changes/Advertisements
☐ Notice of Closure to Accrual
☒ Change(s) to Study Procedures
☐ Other:

1. **Briefly summarize the change(s). For protocol amendments, do not say "See summary of changes provided with amendment." Rather, summarize the nature of the significant revisions.**

We are writing to request approval for revisions to the University of Minnesota Pulse Survey: An Analysis of Employee Attitudes and Work Behavior. This is an ongoing survey of employees at the University of Minnesota with administrations approximately every two years. The majority of elements of the project remain unchanged—the research activities performed, sample selection and elimination criteria, procedures for communication, confidentiality practices, etc. In addition, there is no change to the overall risk to participants; there is no more than minimal risk.
We are writing to request approval of
(1) reduction of survey items
(2) changes to the communications
(3) minor changes to the consent form.

2. **Describe the rationale for the change(s):**

1) The primary change to the survey has been in the removal of items. Given that the removal of items does not present any additional risk, I anticipate this will not be a problem. However, if desired, you can review the survey items in the attached spreadsheet wihich includes the items and indication of which goup they will be administred to (i.e., faculty, staff, P&A).
2) We have made minor wording modifications to the consent form (e.g., date changes, introductory text). All elements of informed consent are present.
3) We have made modifications to the communications to shorten them and attempt to increase response rates by l inking the message to what role the results will play.

3. **In your opinion as principal investigator, how will these changes affect the overall risk to subjects in this study?**

Not at all.

4. **Do the changes to the study prompt changes to the consent form(s)?**

☐ **No.** ☒ **Yes.**

If yes, attach a copy of the revised consent form(s) with changes tracked or highlighted as well as a clean copy. Use this space to further describe consent form changes if necessary: Changes to consent form have been changing 2008 to 2010 and from "third administration" to "fourth adminisrtation."

Principal Investigator's Signature **Date**

Appendix E. Survey Consent Form

PULSE SURVEY CONSENT

2012 University of Minnesota PULSE Survey

Dear University faculty and staff members:

Welcome to the University of Minnesota 2012 Pulse Survey! This is the fifth administration of the University-wide survey designed to better understand the work experiences of all its employees. In this survey, you will be asked a variety of questions about your job experiences, your attitudes about your job and department, and your behaviors on the job.

What will I be asked to do?
Complete this online survey by May 11th, 2012. It should take about 20 minutes. If you decide to complete this survey, you may use work time to do so.

Your answers are confidential.
Only researchers associated with the project will see your responses to the survey.. A research team at the Human Resource Research Institute (HRRI) at the University of Minnesota, led by Professor Theresa Glomb, Department of Work and Organizations, Carlson School of Management, is leading this project with support for administration from the Office of Institutional Research (OIR). All responses from the surveys will be kept securely by the HRRI and OIR researchers. Results will be reported at the University, campus, and unit level only for groups where there are sufficient response rates.

No one other than the researchers affiliated with HRRI or OIR will have access to your data.

Your supervisor or responsible administrator will never be able to see your responses.

Any report prepared for the University will not include any information that will make it possible to identify a participant or small group of participants.

There is a unique identification number associated with your survey responses. This identification number will **only** be used to match your survey data with data from other Pulse surveys and computerized data from the University databases. For example, we can link your survey information with information from past and future Pulse Surveys, information about your tenure at the University, job changes you have made, etc. Even though we *could* identify you personally that is not our intention. We are only interested in being able to link your responses to other information. This identification number will **only** be used to match your survey data with other information and then will be separated from your data.

There are no risks associated with your participation in this survey.

This is voluntary.
You may choose not to participate in this survey. If you do decide to participate,

you are free to drop out of the survey at any time. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota or the HRRI.

When completing the survey, please give your most honest and candid responses. You may skip any question that you do not want to answer. However, we hope that you will answer all the questions honestly, giving us the best possible information.

Questions?
If you have any questions about the survey, you may contact OIR at j-murd@umn.edu. If you have any other concerns regarding this survey and would like to talk to someone other than the researchers, contact the Research Advocate Line, D528 Mayo, 428 Delaware Street SE, Minneapolis, MN 55455, or phone (612) 625-1650.

Human Subjects Code Number: 0512S77846

Click on the button below if you agree to take this survey.

Continue on to the survey

Thank you for your help with this important survey!

Appendix F. SRT Form

University of Minnesota Student Rating of Teaching

Your responses to this questionnaire are important because they will be used in tenure, promotion, and salary decision decisions for your instructor. Your thoughtful written comments are especially requested, may help your instructor improve future course offerings. The results of this evaluation (including the evaluation forms) will not be returned to the instructor until after the final grades are submitted for this course. In addition to a No.2 pencil, you may use a blue or black pen to complete this form. Completely fill in the oval of your choice. If you erase, erase completely. Multiple marks will result in the answer being omitted from the results.

INSTRUCTOR:		TERM:		CURRENT YEAR:	
DEPARTMENT:		COURSE #:		SECTION:	

Carefully read each statement and select a response based on the following: 6-Strongly Agree 5-Agree 4-Somewhat Agree 3-Somewhat Disagree 2-Disagree 1-Strongly Disagree

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
1. The instructor was well prepared for class.	⑥	⑤	④	③	②	①
2. The instructor presented the subject matter clearly.	⑥	⑤	④	③	②	①
3. The instructor provided feedback intended to improve my course performance.	⑥	⑤	④	③	②	①
4. The instructor treated me with respect.	⑥	⑤	④	③	②	①
5. I have a deeper understanding of the subject matter as a result of this course.	⑥	⑤	④	③	②	①
6. My interest in the subject matter was stimulated by this course.	⑥	⑤	④	③	②	①

Written Comments

1. What did the instructor do that most helped your learning?

2. What could you have done to be a better learner?

(Please use other side for additional comments.)

To preserve anonymity in small classes, the demographic section below will be cut off before the forms are returned to the instructor.

Cut Here

(continued to the next page)

Did you take this course because it was required or was it an elective?	Cumulative grade point average (through last term):	Year in school:	Primary way in which the course was delivered:
○ Required ○ Required, but one of several choices ○ Elective	○ 3.51-4.0 ○ 2.01-2.5 ○ 3.01-3.5 ○ 1.01-2.0 ○ 2.51-3.0 ○ 0.00-1.0 ○ N/A	○ Freshmen ○ Senior ○ Sophomore ○ Grad/Prof ○ Junior ○ Other	○ Classroom ○ Distance (Web-based, correspondence, etc.) ○ Combination

The following items are optional.			
Age:	Gender:	Ethnic background:	Is this course in your major? ○ Yes ○ No
○ 20 or less ○ 31-40 ○ 21-25 ○ 41 or older ○ 26-30	○ Female ○ Male	○ African-American ○Chicano/Latino/Hispanic ○ American Indian or Alaskan Native ○ Caucasian ○Asian or Pacific Islander ○Other	

Written Comments

3. Additional Comments

Student Release Questions: These questions were selected by the Student Senate to provide future students with information about the course.

1. Approximately how many hours per week do you spend working on homework, reading, and projects for this course?	4. I would recommend this course to other students.
○ 0-2 hours per week ○ 3-5 hours per week ○ 6-9 hours per week ○ 10-14 hours per week ○ 15 hours per week or more	○ Yes ○ No
	5. I would recommend this instructor to other students.
	○ Yes ○ No

(continued to the next page)

2. Compared to other courses at this level, the amount I have learned in this course is:	Rate your instructor in terms of the following characteristics					
○ Less ○ About the same ○ More ○ I have not taken other courses at this level		Agree	Somewhat Agree	Somewhat Disagree	Disagree	Not applicable
	6. Is approachable	○	○	○	○	○
3.Compared to other courses at this level, the difficulty of this course is:	7. Makes effective use of course readings	○	○	○	○	○
○ Less ○ About the same ○ More ○ I have not taken other courses at this level	8. Creates worthwhile assignments	○	○	○	○	○
	9. Has a reasonable grading system	○	○	○	○	○
Course Environment						
1.How would you rate the physical environment in which you take this class, especially the classroom facilities, including your ability to see, hear, concentrate and participate?	Exceptional			Satisfactory		Very Poor
	⑦	⑥	⑤	④	③	②	①
Cut Here						